



Modern Economic
Development

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The Industrial Revolution

to be given on exports, particularly when the payment for them would be made in specie; fourthly shipping as an auxiliary of trade and naval power was to be encouraged, and lastly, commercial treaties were to be entered into to find new avenues and advantages of trade. This was in brief the mechanism of Mercantilism in operation.

The success of Mercantilism, at least in regard to its main objective, was very moderate. This was inevitable as other nations conscious of the necessity of protecting their independence adopted more or less the same measures. Thus there was an all-round neutralisation of the Mercantilist policy in many countries. Moreover, gold continued to flow between nations in spite of restrictions as the exigencies of business required. The failure of Mercantilism in this respect, however, was made up by its success in other directions. The tariff policies arising in pursuance of this doctrine helped the growth of many industries. In England, the development of the early cotton industry was aided by the imposition of heavy duties on the import of cotton cloth. Between 1785 and 1813 duties on calicoes were raised from 16.5 p.c. to 85 p.c.; similarly the duties on muslins were increased from 18 p.c. to 44 p.c. The use of tariff policy as a means of securing a favourable balance of trade did not lose its appeal with the decline of Mercantilism. Indeed, it has come down to the present generation as a heritage of the past and probably its scope has been widened. The use of exchange control, artificial rate of exchange, devaluation, deflation etc., in the present century could be directly traced to the influence of the Mercantilist system. Another achievement of Mercantilism is in the colonial field. In the 17th and the 18th centuries it was widely believed that the colonies existed for the benefit of

the mother country. It gave rise to monopoly trading rights embodied in the company charters. Further, the Navigation Acts of the 17th century were directly prompted by Mercantilism. They resulted in the development of English shipping. The tonnage of ships clearing through English ports which was hardly 371,000 in 1700 rose to 1,958,000 in 1800. Howsoever good these results might have been to the Mercantilist countries, they did not escape from its bad effects. Mercantilism gave rise to international rivalry. It was quite common for nations to be friendly with those countries with which they had a favourable balance of trade and to be unfriendly with others. This attitude was largely the cause of the wars of the 17th and 18th centuries.

The assumptions underlying Mercantilism were doubtful and in some respects fallacious. Its advocates believed that money was the supreme form of capital. They never realised that they could secure the precious metals of which money was made only by parting with goods. To-day there is no doubt about the nature of money; it is a mere medium of exchange for securing real capital. So long, therefore, a country possesses real capital, money is of little consequence. Further, they believed that exports were good and imports were bad. It is hard to believe how all nations could be exporters without their being importers also; one way trade is an impossibility. As a matter of fact, the imports of precious metals would be followed by the import of goods; because, as money was chiefly made of precious metals, their import would result into increased circulation of money and a rise in the price level. Higher prices, given other circumstances, would discourage exports and encourage imports. The precious metals would once again flow out of the country. To-day the

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advantages of international trade are not sought in a favourable balance of trade but in its effects on the development of the resources of a country. The idea of self-sufficiency though desirable within limits would stand condemned and become impracticable if carried to the point of complete exclusion of the goods of other countries. The failure of Mercantilism was in no small measure due to this ideal of self-sufficiency.

Mercantilism which held sway for over two hundred years suffered a defeat at the hands of the leader of the Physiocratic school of thought in France and Adam Smith and others of the Liberal school in England. The Physiocrats believed in the equality of rights of individuals and restriction of governmental interference only to protection of these rights from being interfered with. In the economic sphere, every man had a right to enjoy the fruits of his labour without regulation or restriction. Though, according to them, agriculture was the only truly productive activity, commerce and manufacturing were necessary. However, they emphasised that commerce, whether domestic or foreign, should be free from all possible avoidable impediments and restrictions. Though some of the assumptions of the Physiocrats were not precise and clear in the earlier years, a new light was thrown on them by the writings of Adam Smith in the later years. He pleaded in the *Wealth of Nations* that mutual dependence of nations, instead of being ruinous, was helpful to their progress. In the international commerce he saw advantage to all countries with loss to none. He, therefore, condemned the use of tariff to divert the course of trade unless it was inspired by the purpose of retaliation to the policies of foreign countries or of the revenue requirements of the state. The writings of the Physiocrats and Adam Smith which attacked the very basic ideas of the

Mercantilist school were largely responsible for their declining influence in the 18th and the 19th centuries. However, the greatest cause which brought about the downfall of Mercantilism was the change in the economic conditions initiated by the Industrial Revolution. After the rise of the factory industry, the interests of England lay in the liberalisation of trade rather than in its restriction. Yet even to this date it has not lost its appeal to many. Even Adam Smith never expected that Mercantilism would completely succumb to the attacks of Liberalism. He wrote "to expect that the freedom of trade should ever be entirely restored in Great Britain is as absurd as to expect that an Oceana or Utopia should ever be established in it. Not only the prejudices of the people, but what is more unconquerable, the private interests of many individuals, irresistably oppose it" However, in England, Mercantilism lost its influence by the third quarter of the 19th century; in other countries, it lingered still longer. Unfortunately, however, Mercantilism in a different guise has staged a comeback in the policies of many countries after the Great War.

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It is not possible to lay down any chronological limits to the economic movement set up by the Industrial Revolution because to do so would be to admit the end of economic changes. However, looking back over the current of economic history, it becomes unmistakably clear that the main changes which have given rise to the present structure of the world took place in the period beginning with 1760 and ending with 1830. This period, therefore, has been regarded as the period of the Industrial Revolution in England by Arnold Toynbee and other writers. It was in these years that the main technical inventions in the field

of industry appeared. Between 1765 and 1785 several inventions were made which revolutionised the textile industry. To mention a few, the spinning Jenny was patented by Hargreaves in 1770; the Water-frame was invented by Arkwright in 1769; the Crompton Mule was patented in 1779; and James Watt patented the steam engine in 1769. Inventions spread from one industry to another. New industries sprang up where formerly none existed. The demand for machinery and engines led to the development of the iron and coal industries on which the progress of the Industrial Revolution hinged. England was fortunate in possessing both, coal and iron ore, in abundance. Soon the impact of changes in the industrial field spread to the whole economic field and far-reaching changes occurred in the means of transport and the methods of commerce. Canals, durable roads, railways and finally steamships narrowed distances internally and between countries of the world. The methods and organization of commerce changed in keeping with changes in other fields and the rise of banking, insurance and a class of specialists in trade widened the boundaries of commerce and in their turn aided the success of the Industrial Revolution. All these changes, however, were achieved not in one decade but were spread over two generations.

The main features of the Industrial Revolution may be briefly described. It introduced change in the methods and organization of industrial production. The old domestic system of industry was replaced by the factory system. This was an inevitable result of the introduction of machinery. It required large capital, continuous use to make it economical and large supply of raw materials which were not within the means of an ordinary artisan. But the increase in output which was made possible with the use of machines gave opportunities o

increased profits and hence capital was attracted to the new methods of production. Factories using machinery and mechanical power, employing an army of workers, producing huge quantities of material and ordered by the law of profit sprang up in England. It thus gave rise to the new factory civilisation. Capital came to occupy a commanding position in the industrial organization. This change in the methods and organization of production introduced visible changes in the English economy. Regulation of industry through gilds characteristic of the previous centuries finally gave place to competition. Freedom of movement and occupation restricted under the gild regulation would have made the factory system unworkable, and hence Arnold Toynbee regards the substitution of custom by competition as the ~~chief~~ result of the Industrial Revolution. Competition as opposed to custom in the economic field has become a force of no less importance than the motive of profit. The population of England also showed remarkable reactions to the industrial changes. The centre of density changed from the south to the north. The southern counties were mainly agricultural. With the establishment of industry in the north round the coal fields, the exodus of population towards the north started. In addition, the process was speeded up by the agricultural revolution. The relative population of Ireland and England also changed as Ireland remained largely agricultural even after the industrial changes in England. But more surprising than this was the rapid increase in the population of England. It was 5 millions in 1600 and it increased to barely 6½ millions in 1750. Thereafter, it progressed to 9 millions in 1800 and nearly 18 millions in 1851. It again doubled by 1901. It seems that this growing population was absorbed in the industries as the percentage of agricultural population

not only did not show any increase but actually showed a continuous decline. It was about 77 p.c. in 1700 and after the Industrial Revolution gradually declined to 28 p.c. in 1831. One of the most serious results of the Industrial Revolution and its product the factory system was a change in the distribution of wealth. The worker became merely a slave for wages bound to his employer by the tie of cash nexus, while the employers who contributed capital got a lion's share in the benefits of production. This resulted in widening the gulf between the workers and the employers and dividing the society into two distinct classes, the proletarian class and the capitalist class. The labour movement aimed at securing to the worker his just place in industry was born of the friction between classes. The Industrial Revolution thus without producing human well being. This became all the more painful because of the shifting of political power. Until the reforms of the 19th century the working population which had left the countryside and moved to the cities had no voice in the Parliament. Their life was regulated by a government in the election of which they had no share.

It will be also interesting to study here as to why the industrial changes occurred first in England and not other countries like France, Holland, Germany and Spain which were then among the leading nations of Europe. The causes which helped the industrial development in England and held it up in other countries are many and complex. For decades before the Industrial Revolution, France was one of the competitors of England and in many respects ahead of her. She had a growing foreign trade, inventive genius and good roads. The beginnings of a cotton industry worked by machines were already noted before the French revolution of 1789. But industries

did not make progress probably because the French banking system, after the shock received from the failure of the financial schemes of Law, received a setback with the result that the French savings remained scattered in the hands of individuals. The progress of machine industry could be possible only with the pooling of these resources. Moreover, the system of gilds and monopolies still prevailed in France. Serfdom was not altogether rooted out. The French monarchs and politicians, engrossed in the dynastical problems, had paid little attention to the economic needs of the country. These adverse factors which had already spread a discontent among the population were heightened by the French revolution. It put the clock of progress back by half a century and by the time France could recover from the shock, England had stolen a march over her. Germany's progress was hindered by the lack of capital, obstacles to trade in the form of tariff divisions and the preoccupation of the people with militarism. Germany's energies were largely used up in protecting her independence from the powerful nations on her frontiers. She was always a nation in arms. Holland possessed considerable capital, shipping and a banking system fairly developed. But she failed in the international rivalry for colonies and, therefore, her foreign trade was declining. The political system of the country also was cumbrous and highly local in nature with the result that the development of a strong national policy became difficult. The conditions necessary for the development of industries thus were not present. In Spain, the development was hindered by the excessive interest of her people in religion and militarism.

Compared to the adverse factors in all these countries England enjoyed a fortuitous combination of factors helpful to the development of industries. She

- had a small population and a growing foreign trade
Her foreign trade was :

	Exports	Imports
1712-13	£ 7.3 millions	£ 5.8 millions
1750-51	£ 1.39 "	£ 7.9 "
1770-71	£ 17.1 "	£ 12.8 "

- The small size of population could not cope with the growing trade. There were occasions on which the weavers in the country were idle for want of adequate supplies of yarn. Naturally the inventive mind was directed to this difficulty. This explains probably the early inventions in the textile industry. In the coal industry a similar situation led to inventions. Charcoal was largely used for domestic purposes and for smelting iron. In the early eighteenth century, there was a famine of timber and charcoal was not available. Pit-coal could not make up the deficiency as the problem of removing water from the pits was difficult. Hence the early invention of steam engine to pump water from the pits came to the rescue of the coal industry. The inventions therefore, of the eighteenth century were the outcome of necessity.

In addition, other favourable factors helped these inventions to be used fruitfully. England had accumulated vast amounts of capital from the profits of her growing trade. Her banking system was well developed to collect these savings and make them available for useful investment. Internally, with abolition of serfdom and the decline of gilds, people enjoyed more freedom of movement and occupation than in any other country. Similarly her home trade enjoyed freedom from internal tariffs. A strong monarchy was established as far back as 1485 and therefore, the development of a national policy became possible. Moreover the stability of the political

institutions and a successful foreign policy gave her political security so necessary to create confidence among investors and to encourage them to embark on ambitious undertakings. Mercantilism in the earlier centuries had already led to the development of her mercantile marine. It helped her to build up her trade with foreign countries and establish commercial relations with their people. England's geographical position at the head of the Atlantic and on the outskirts of Europe was in no small degree responsible for the growth of her commerce and, therefore, the growth of her industries. The foregoing brief review of the economic background of many countries thus leaves no doubt as to the causes of the development of industries first in England rather than in other countries. No other country enjoyed so many favourable factors as England. Hence, the fortuitous combination of favourable circumstances was responsible for the Industrial Revolution in England.

Chapter II

THE REVOLUTION IN AGRICULTURE AND AFTER

The changes in the field of agriculture in the 18th and the 19th centuries were no less important than in the field of industry. As said before, the population of England increased rapidly after the middle of the 18th century. To supply the increasing demand of this population larger food supplies were necessary. They were made possible by the agricultural changes of the earlier centuries but more particularly of the 18th and the 19th centuries. These changes were so momentous that they have been conveniently described by the phrase Agricultural Revolution.

To understand the Agricultural Revolution of the 18th century, a brief description of the agricultural methods and organization in the earlier centuries would be very useful. In the Middle Ages, the centre of agricultural activity was the Manor with a lord at its head. A part of the arable land of the village was held by freeholders, socagers and villeins on different terms of service to the lord. A very large part was held by the lord himself for his own use. The pastures, and, the woodland and the wasteland were held in common between the lord and the peasants. Lands were not fenced and the customary three-field system of cultivation was in vogue. The manorial court controlled all agricultural activities. The manor was self-sufficient in all respects.

In the 16th century, because of the shortage of labour after the disappearance of villeinage and the increased opportunities of making larger profits on wool production, the lord started enclosing his demesne lands and appropriated others by evicting tenants. Arable lands were turned into pastures for sheep farming. Thus subsistence farming gradually gave place to farming for market. This early enclosure movement had striking results. The open-field system gave place to enclosures; consolidation of land was undertaken and a spirit of change was introduced in English agriculture. It had, however, disastrous results for the poor, as in the absence of alternative openings, those who were displaced remained unemployed. The contemporary government frowned on the movement but with little result. The progress of enclosures was no doubt slackened but the movement did not completely die out.

At the beginning of the eighteenth century, English agriculture had made very little effective progress. The three-field system was quite common, the implements were primitive, the art of cattle breeding was

unknown and the relations of the landlords to the farmers were none too happy. Stated briefly, the spirit of enterprise was lacking and progress was difficult. It has been rightly remarked that reform in agriculture in England was impeded because "the English society still looked to the past more than to the future, honoured custom rather than science and piety rather than enterprise". Great efforts, therefore, were necessary to bring about a progressive change in English agriculture.

The attention paid to English agriculture by many persons in the early decades of the 18th century held out great hopes of improvement. Amongst the persons who made systematic efforts to improve agriculture, mention must be made of Jethro Tull who published his book on agriculture in 1731. He had studied agriculture in France, Germany and Netherlands. He, therefore, based his ideas on a comparative study of agriculture in foreign countries. Consequently his great originality lay in devising a method grounded on observation and deduction rather than the lore of inherited knowledge. He was the first person to conceive of the modern idea of intensive agriculture. He laid stress on four improvements : (1) deep-hoeing ; (2) a system of continuous rotation of crops and the suppression of the system of fallows ; (3) introduction of turnips and beets for providing winter food to cattle ; and (4) the selection of seed. The ideas of Jethro Tull came at the right moment. It was at this time that the English aristocracy was influenced by the desire for increasing wealth. They, therefore, wanted to use their resources in the best possible manner.

The effect of the advocacy of Jethro Tull on the English landlords was so great that many of them began to think seriously about agriculture. George III himself began to contribute articles on agriculture.

- to the journal, the *Annals of Agriculture*, under the nickname of Farmer George. Lord Townshend, who was the English Ambassador to Netherlands, turned to agriculture. His enthusiasm for agriculture earned him the honour of being called Turnip Townshend. He contributed not a little to the improvement of agriculture. He advocated proper drainage of soil and improvement in the breeding of cattle. Bakewell, another pioneer in modern agriculture, wrote on the methods of improving the breed of cattle. Thus between 1730 and 1760, a number of landlords turned to agriculture and it became a matter of pride for them to say that they were managing their own farms. By 1760, the lead given by the landlords was taken up by the whole nation and English farming received a great impetus. The new spirit was aided
- in no small degree by the contemporary changes in the field of industry and transport. There arose in England a new class of farmers who took to agriculture imbued with the spirit of enterprise.

The improvements in agriculture coincided with the Industrial Revolution and were in no small measure influenced by it. The rise of capitalism in the domain of industry and trade gave a new prestige to the industrialists and merchants. It naturally led to the rise of capitalism in agriculture. The farmers were not slow to see that with the growing population of England and its concentration in cities, production of food would become a paying undertaking. Improvement in agriculture, however, could come only by giving up the agelong traditions of the open-field organization and the three-field cultivation. In bringing about this change they received support of the economists like Adam Smith. And fortunately for them the Parliament at this time consisted of powerful agricultural interests and, therefore, any legislation necessary for the improvement of agricul-

ture could be secured with little resistance. It was however realised that the improvements could be made only after the land was enclosed. Hence the landlords started on the mission of destroying the vestiges of medievalism in agriculture by enclosure of land.

Thus started the enclosure movement of the 18th and the early 19th centuries. The ~~land~~ lords enclosed their lands after either arriving at a common agreement with the interests concerned, i.e., freeholders, and leaseholders who held land from the lords under different terms, or by securing an Act of the Parliament to enforce enclosure on the dissentient tenants. The Parliament which was dominated by landlords who had seen the advantages of improvement was more inclined to favour enclosures this time than on a similar occasion in the sixteenth century. After an Act of the Parliament was passed, the matter was left to Commissioners for execution. By the subsequent legislation of the years 1801, 1836 and 1845, enclosures were rendered progressively easy. The result of these Acts was that in the period 1760 to 1849, land measuring nearly 8 million acres was enclosed under 3,840 Acts of the Parliament; the same figures for the previous period 1700 to 1759 were hardly 337,800 and 244 respectively.

The effects of these enclosures were mixed. Agriculture in England definitely benefitted by them. The size of holdings increased and scattered holdings were made compact. Land could be used for the purpose for which it was best suited without being fettered by a uniform system. Waste of land under the system of fallows was eliminated. Ploughing, manuring and supervision of land was rendered easy and the fences protected crops from cattle. Further, land was rid of the system of tithes according to which a tenth part of the produce had to be paid to the clergy. A pro-

- gressive farmer was now free to give expression to his ideas in the cultivation of land without waiting for the unprogressive ones to change their mind. The system of cultivation also changed. The old rotation of crops gave place to a more varied and continuous rotation. Turnips and clover were introduced. The drainage of land also was improved and even marshy places were reclaimed for cultivation. Thus the above changes brought about a revolution in the basis of English agriculture in two directions. Firstly, it gave rise to capitalism in agriculture; thus capital was applied to the purchase of land, its consolidation and the consequent concentration of its ownership in fewer hands. Capital was also used for the improvement of the methods of cultivation by the introduction of costly machinery and fertilizers. Secondly, for the first time science was pressed in the service of agriculture for increasing its yield and reducing the costs of production.

Although the enclosure movement of the 18th and the 19th centuries improved agriculture, it struck a blow at the poorer classes dependent on it, more particularly the small farmers, cottagers and squatters. The small farmer whose land was appropriated under an Act of the Parliament had neither the means nor the knowledge to fight his case at law. And even after fighting it, if he came out successful, being deprived of the use of common wastelands and woodlands, had little chance of deriving enough from his land to maintain a family. He, therefore, sold his land and migrated to town. The cottagers and the squatters were labourers who worked as agricultural labourers and lived on common lands. With the enclosure of common lands, they also had to leave the villages to find work in towns. The enclosures, therefore, led to the depopulation of villages. Lord Ernle, therefore, criticised the enclosures by saying that "the divorce

of the peasantry from the soil, and the extinction of commoners, open field farmers and eventually of small freeholders were the heavy price which the nation ultimately paid for the supply of bread and meat to its manufacturing population".

The success of the Industrial Revolution, however, was indirectly helped by the Agricultural Revolution. Farmers and labourers who left the countryside joined the ranks of the workers in factories which were springing up in England at this time. Even the village artisans who depended on the common rights for their existence left the villages because the common rights were lost and the goods they produced could not stand the competition of the factory workers. In addition, the enclosure movement which led to large scale farming and extension of agricultural lands, provided larger supplies of food to the population of the growing industrial cities. Combined with this extension, the growing population of England made agriculture a profitable undertaking. The protection given to agriculture by the Corn Laws was also in no small degree responsible for the prosperity of agriculture at this time. Thus the agricultural changes of this period were necessary for the success of the Industrial Revolution and the latter in turn aided the prosperity of agriculture.

Agriculture Before 1875

The progress of English agriculture before 1875 can now be summed up briefly. It enjoyed a period of prosperity upto 1875 largely through the improvements introduced in the previous decades. Better seeds and equipment were used in the production of goods. The costs of production also declined. The prices realised were good and, if they were low, the producers could wait for their rise. The period, however, noticed a total disappearance of the yeomen.

Though legislation was enacted in 1819 and 1832 enabling the local authorities to acquire land and allot it to the poor farmers, it proved of little help. The result was that the agricultural population in England continuously declined. The following figures of the population dependent on agriculture clearly show the decline :—

1811	34 p.c. of the total population
1821	32 p.c. "
1831	28 p.c. "
1841	22 p.c. "
1851	16 p.c. "
1861	10 p.c. "

An interesting aspect of this period which had far-reaching effects on English agriculture in the closing decades of the 19th century, is the imposition and removal of the Corn Law duties. English agriculture enjoyed a period of prosperity during the Napoleonic wars. Prices were high and rents satisfactory. In 1815 when peace was restored, agricultural interests were afraid of a fall in prices as well as in rents. The Parliament, dominated by the agricultural interests, was therefore led to pass Corn Laws in 1815 restricting the import of wheat and cereals by correlating it to the prevailing prices in the country. The great argument in favour of them was the need for stabilisation of corn prices. They were, however, opposed by many on the ground of their being detrimental to the nation at large and the poorer classes in particular. In the subsequent years, neither prices nor rents showed that the farmers had benefitted by them. The Corn Laws, however, continued on the statute book. In 1838 an Anti-Corn Law League was started by Richard Cobden, John Bright and Charles Villiers. Though the League did not succeed in securing seats in the Parliament, it influenced the opinion in the country. Sir Robert Peel who formed a protectionist

ministry in 1841, however, was later on convinced of the serious effects of the Corn Laws. They were scrapped in 1846. A small import duty which was continued was also finally removed in 1869. England's interests no doubt required the removal of the duties because English industries had developed in the meanwhile and were in need of markets. England could sell manufactures to foreign countries only if she could import food and raw materials from them. The agriculturists, however, criticised the policy by saying that it was a sacrifice of their interests for the interests of the industrialists.

The immediate effects of the abolition of the Corn Laws were not disastrous because foreign competition was limited. Russia was just recovering from the Crimean War. Later on Germany was engaged in a war with Denmark and Austria. The United States were engaged in a Civil War. At home the improvements in agricultural methods continued with more vigour. The Royal Agricultural Society was established in 1838; the Royal Agricultural College and the Agricultural Chemistry Association were started in 1842. All these institutions devoted their energies to the improvement of agriculture. Hence agriculture enjoyed a period of prosperity inspite of the removal of the Corn Laws. These years, therefore, were known as "good years" for agriculture.

After 1875

The last good year for agriculture was 1874. Thereafter prices began to fall. The average price of wheat which was 55s. per quarter between 1871 to 1875 declined to an average of 28s. between 1891 to 1895. The area under wheat declined from 3.7 million acres in 1870 to 1.9 million acres in 1911. The tendency for arable land to be turned into pastures became more pronounced. Thus in 1871 the arable land in Eng-

land measured 18.4 million acres while the pasture land measured 12.4 million acres ; the same figures in 1914 were 14.3 and 17.3 million acres respectively. However in the three decades after 1875 the area under grain declined by nearly 40 per cent. While the English agriculture was undergoing striking change arable farming in other countries was increasing. This is indicated by the following figures :—

Wheat acreage in millions

	1870	1903
England (European)	28.7	45.1
U. S.	5.0	9.2
U. S.	18.9	49.5
Canada	1.6	4.4

The magnitude of the change in English agriculture could be seen from the fact that between 1841-1906 home grown meat was sufficient to feed 90 p.c. of the population but after the changes mentioned above, in 1906, it could be hardly sufficient to feed 10.6 p.c. of the population. In the same period the quantity of local meat hardly increased by 5 p.c. Thus England became wholly dependent on foreign supplies. The figures of the imported food also prove the same fact. In 1875 the food imports were worth £124 million they rose to £205 millions in 1905.

This decline in English agriculture was largely the result of foreign competition which was facilitated by the changes in the means of transport in the years 1850-70. The construction of steel ships propelled by steam had revolutionised the oceanic transport. Further the construction of refrigerator ships had facilitated the transport of perishable goods. Thus American meat began to be sold in England. The free trade policy of England also helped this competition in no small degree. The resulting fall of price created economic and social problems for England.

requiring immediate attention. Improvements in agriculture were arrested and the extension of pastures led to the exodus of population from the countryside to the towns. There was, therefore, a deterioration in the character of rural population. In the countryside the persons who were left behind were either the aged or the decrepit, or the less intelligent or those who were helpless. But the problem was more serious than this. On political grounds England needed a more self-sufficient agriculture. On economic grounds the existing organization of agriculture was wasteful because the landlord who owned a big holding turned it to pasture farming, if arable farming was not paying, against the national interest. On social grounds also the new tendencies were not in her interest. The well-being of the nation requires a healthy rural population, more so because of the waste of human life in modern industrialism which can be made good only from the rural areas. State briefly, England realised, though late, that what she needed was establishment of small holdings cultivate by a healthy race of contented peasants and not large farms. This could be attained by breaking up the large estates. The public opinion also demanded break up of the large farms.

The matter was investigated by a number of committees. The Royal Commission on Agriculture (1879-82), the Departmental Committee (1885) and the Agricultural Committee of the Unofficial Tariff Commission (1904) reported on the subject of the creation of small holdings in England. On the strength of their findings a number of Acts were passed to revive small holdings. By the Allotment Extension Act of 1882 and Allotments Act of 1887, small pieces of land were to be given to agricultural wage-earners to be cultivated by them in their spare time. This policy however, could not set up small agriculturists depen-

dent mainly on agriculture. In 1892, therefore, the Parliament passed the Small Holdings Act. It gave the county councils power to borrow money from the Public Works Loan Commission to buy land and to sell it in small parcels of one to fifty acres to agriculturists on easy terms of payment. This policy also failed as hardly 850 acres of land could be purchased upto 1908. This measure failed largely because the county councils had no power to force the landlord to sell land. In 1907, therefore, the Small Holdings and Allotments Act was passed. The county council were given power to buy land from the landlord compulsorily, improve it and sell it in small pieces to individuals, groups of persons working on the co-operative principles or to associations formed for the purpose of encouraging small holdings. Payment was permitted to be made on easy instalment terms. By 1912, about 155,000 acres of land were so purchased and distributed. The lead given by the government was also taken up by a number of private associations formed for the purpose.

The policy of creating small holdings, however, would not succeed unless facilities possessed by the large farmers were made available to the peasants by some measures. The measures taken in this regard were as follows. Firstly, it was necessary to encourage the spread of co-operation. On the continent co-operation had spread widely; while in England had not spread to rural areas. In the field of production and distribution there were in all 478 societies with a membership of 4,800 persons and a turnover of £2 millions. But most of these societies were in the dairy industry. Even in the matter of agricultural credit provided by co-operative societies, England was behind many countries of the continent. In 1912 while there were 17,000 credit societies in Germany there were only 15 in England. Government, there

fore, decided to encourage co-operation in the interest of the small farmer. Secondly, agricultural education for the small farmers was given more attention than before. Thirdly, to safeguard the interests of the agricultural labourers, organization on the principles of trade unions was encouraged. These were measures which did not meet with any opposition. In this period, however, the radicals in the country demanded a more effective policy than contained in the above measures. They demanded a stringent rating and taxation of land values, imposition of protective duties and even the nationalisation of land, if necessary. These were proposals which would not go unchallenged. The movement for protection to agriculture which was also strong was sponsored by Joseph Chamberlain in 1903 and received a good backing from the country. It was supported by the Unofficial Tariff Committee of 1904. But as the liberal party continued in power, Joseph Chamberlain did not succeed in his agitation. The liberals however had to take some measures. In 1912, Mr. Lloyd George, the then Chancellor of the Exchequer, instituted an enquiry into agriculture. On the findings of this enquiry, he came to the conclusion that agriculture in England was the least controlled of monopolies and, therefore, was characterised by the prevalence of landlordism and irresponsibility. He, therefore, prepared a programme which consisted of the : (1) creation of a Ministry of Lands with power to introduce small holdings ; (2) fixation of minimum wage of agricultural workers ; (3) regulation of the hours of work of rural workers, and (4) the laying down of a housing programme for the agriculturists. The programme could not be introduced as very soon the Great War broke out.

During the last war the tendency for the break up of the estates continued largely because of high taxa-

tion, high wages and dearth of labour ; with the slump of prices after the war, the tendency still persisted. Thus between 1913 and 1921, the number of holdings increased from 48,000 to 70,469. Another estimate made in 1930 showed that between 1919 and 1927 the number of persons who farmed their own land increased by 98,000 and the acreage affected by it increased from 3 to 9 millions. But the farmers who bought land in this period did so by borrowing at high rates of interest with the result that they were faced with ruin with the continuous fall in prices. Lord Addison for example points out that 90 p.c. of the farmers who bought land during 1919-1921 were ruined. The agricultural situation, therefore, became critical with the fall in prices.

Government could not allow the situation to deteriorate further. The early measures taken by it were : (a) a reduction of rates in 1923 ; and (b) an introduction of a subsidy on sugar beets in 1925. But this did not help the farmers much. The crisis of 1931 and the subsequent fall in prices made the situation worse. In 1931, therefore, the agricultural interests demanded protection to agriculture. The farmers in England generally vote for the conservatives. The National Government was dominated by the conservatives. It had, therefore, to redress the grievances of the farmers. But it could not introduce protection for agricultural goods, because such a step would amount to taxing the food of the people. It would also affect the industries adversely. In this predicament, there were two alternatives before the English government ; either to give a bounty on production or introduce an import quota. In 1932, the government applied quota to wheat imports and also assured a minimum price to the home growers. The home market to the extent of 48,000,000 bushels was reserved for the home production and the minimum guaranteed

price was fixed at 45s. to a quarter. If the price was lower than this, government was to make good the deficiency. The finance necessary for the purpose was to be raised by a process tax on the flour millers who were expected to pass it on to the consumers. Foreign supplies of fruit, vegetables, bacon and dairy produce were subjected to an import duty. As far as meat is concerned, a quota was applied to imports by making a necessary provision in the trade agreements signed with the Empire countries, Denmark, Argentina, etc. Further, by the Agricultural Marketing Act of 1931, marketing schemes were introduced for many commodities to regulate their prices. Thus latterly the government has awakened to the importance of protecting the small farmer. It is to be seen how far the government policy would help to reverse the agricultural tendencies of the 19th century. A clash of industrial and agricultural interests would need to be avoided.

Chapter III

THE REVOLUTION IN TRANSPORT

The Industrial Revolution changed the technique of production by introducing machinery. Machine production, however, implies large scale production the success of which would depend on the existence of wide markets. Unless, therefore, the means of transport had undergone a revolutionary change, widening the scope and area of markets would have been impossible. Hence the revolution in transport was a necessary accompaniment of the Industrial Revolution. In England it was completed in four successive stages: (1) betterment of roads, (2) construction of canals, (3) construction of railways, and (4) application of steam power to water transport.

Improvement of Roads

There were many roads in England before the advent of the Industrial Revolution, but they were in a miserable condition. Neither the art of constructing roads had sufficiently developed nor, after construction, they were maintained in good condition. The roads were no better than mere earthen tracks useful only for the pack-horses and that also during certain parts of the year. Transport of bulky goods was difficult. There was enormous delay and the cost of transport was also very high. The industrial development of the eighteenth century would have been held up if the condition of roads had not improved and other means of transport were not introduced.

This condition of roads was no doubt largely the result of lack of knowledge of constructing roads and proper supervision. Under a statute of 1555, the construction and maintenance of roads was left to unpaid parish officers. It provided that persons staying in a parish had to give six days' compulsory labour in a year. Those whose annual income exceeded £50 had to give the services of a man, a horse and a cart for six days in a year. With the help of these the parish authorities were supposed to make and maintain roads. The system achieved no substantial results.

With the opening of the eighteenth century, a change came in this system. Construction of roads on the basis of local organization was introduced. Turnpike trusts began to be organized under Acts of the Parliament. The finance necessary for the purpose was raised from those who used the roads constructed by these trusts. The new drive gathered speed as is evidenced by the Acts passed by the Parliament. Between 1760 and 1774 no less than 450 Acts were passed. The system, however, had its own defects.

b It lacked planning and sometimes local interests clashed with national interests. In spite of these drawbacks, it must be admitted that the system achieved considerable success, more particularly after the inventions of Metcalfe, Telford and Macadam who devised the means of constructing a durable surface bridges and culverts. With the help of these engineers, the trusts were able to bring about a revolutionary change in the utility of roads. Stage-coaches carrying passengers and wagons carrying goods began to ply on the newly constructed roads. This resulted in a good deal of saving of time and cost. The latter, however, still remained substantially high. Thus the rate for transport of goods between London and Birmingham was £5 per ton while between London and Leeds it was £13 per ton. The comparatively high cost of transport led to the next stage in transport revolution, viz., the construction of canals.

Unlike France, England had paid no attention to the improvement and use of internal waterways, though in the early eighteenth century some of the rivers in the industrial districts were deepened and made useful for navigation. Canals or artificial waterways, however, were not attempted. In the middle of the century, the demand for coal increased with its use in the smelting of iron. The landowners who possessed coal fields were interested in developing suitable means of transport for coal which would be less costly than the road transport. The initiative was taken by the Duke of Bridgewater who was one of the big mine owners. With the help of James Brindley, an engineer, he built a canal from Worsely to Manchester in 1761. The success of this enterprise led him to connect it with Liverpool. Immediately the price of coal in Manchester went down by half. This canal enterprise aroused the interests of those who had capital and soon a number of canal companies

were incorporated. By the end of the century, the canal mileage increased to 3,000, and many important centres of trade and industry were connected with each other.

The canals proved greatly useful to the economic development of England. Import of raw materials and export of manufactured goods were rendered easy. The consequent growth of industries clearly showed that canals had proved vital to their progress. The cotton textile industry in particular developed very rapidly. In 1829, when the railway development had just made a beginning, there were no less than 50,000 power looms working in England ; the import of cotton wool had increased from 4 million lbs. in 1764 to 300 million lbs. in 1830 ; exports of manufactured cloth had risen to £18 millions, and the industry was employing 800,000 persons. But this was not the only result of the canal system. In fact it was responsible for quickening the pace of all economic changes. The movement of population from the agricultural areas to the industrial centres was facilitated, the development of the great ports was made possible and even agriculture benefitted to no small degree. The increasing demand for food from the growing population led to the development of large farms the production of which was moved with the help of canals. The resultant prosperity of the country was reflected in the earnings of canals. Dividends ranging from 30 to 75 p.c. were declared by the canal companies in 1825.

But by the end of the first quarter of the nineteenth century, the industries and trade of England had reached a stage where canals were unable to cope with their requirements. Moreover, canals used to get frozen in some parts of the year to the annoyance of trade. However, the chief cause which called for further improvement in the means of transport was

that the growing trade of England required a quicker means of transport than canals. Thus the railways were a natural outcome of the pressing necessity for improved means of transport.

Advent of Railways

Attempts at constructing a locomotive were made as far back as 1784 by one Mr. William Murdoch. Thirty years elapsed before any demonstrable success could be achieved in this direction. It was George Stephenson who finally showed the practicability of locomotion in transport in 1814. The general public in England, however, showed great concern regarding the effects of the new invention and created obstacles in the way of its introduction. This opposition was, however, soon overcome and in 1821, the Parliament passed an Act permitting the construction of the first railway line between Darlington and Stockton. Thus the era of railway construction started in England. It may be conveniently divided into four periods to facilitate study: (1) 1825 to 1844, the period of experiments; (2) 1844 to 1872, the period of consolidation; (3) 1872 to 1893 the period of attempt at Parliamentary control; (4) 1893 onwards, the period of further amalgamations and state control.

1825 to 1844

The first railway line was opened in 1825. Since then railways proved a financially successful proposition. Between 1825 and 1835 no less than 54 railway Acts were passed and the mileage had reached nearly 500. The railway companies had also succeeded in paying dividends ranging about 10 per cent. In the meanwhile, the banking system had developed rapidly under the concessions given by the Acts of 1826 and 1833. Industrial prosperity had led to the accumulation of capital. To take advantage of the low interest rate, the government also decided to convert its loans

from a higher to a lower rate of interest. The investors who had investible resources, therefore, regarded investment in railways as preferable to government investment. Between 1836-37, therefore, no less than 39 bills received sanction of the Parliament and the railway mileage reached 1,000.

The growth of railways gave rise to two problems: firstly, there was lack of planning and secondly, the railway interests were growing powerful and were likely to develop into a monopoly. The Parliament therefore felt the need for controlling the railways, but it could not make up its mind on the manner or the extent of control. It did not want to interfere with the new enterprise nor did it want the railways to grow uncontrolled. It, therefore, took some half-hearted measures. It increased the powers of the Board of Trade which was entrusted with the work of supervising the railways. In 1842, it was laid down that no new railway could be started without the previous sanction of the Board. In 1844, it was further provided that the railways were not to enhance rates and fares if their dividend exceeded 10 p.c. and that the railways constructed in future might be purchased by the government after a specified time. These measures were not likely to help the control of the railways in the interest of the public. What was wanted was a control over services and maximum rates and fares. But because of the growing influence of the laissez-faire doctrine on the Parliament as well as the general public, it could not think of a detailed regulation. The Economist rebuking the government wrote on February 15, 1845: "We have often expressed our opinion that one of the most dangerous tendencies of our legislation of late, in imitation of the worst principles of other countries, has been to concentrate power in the hands of government". The railways, therefore, uncontrolled by the government

continued to exploit the trade and industry of the country.

1844 to 1873 *period of consolidation*

In 1844, there were 2,100 miles of ~~operating~~ railways. They had linked the important centres of trade and industry. Financially they had proved a great success. The railway organizations, however, consisted of a large number of small and big concerns. At this time, therefore, it began to be realised that the multiplicity of management was conducive neither to economy in management nor convenience of travel. With the banking development of the country, the investible resources had increased. George Hudson, a financial genius, held out wild prospects of gain from investment in railways. Hence the period opened with new construction of railways and the amalgamation of the existing lines. The railway mileage jumped to 6,620 in 1850. Between 1844 and 1850, no less than 43 Acts were passed by the Parliament permitting amalgamation in one form or another.

It is interesting to note that while the railways were developing into a monopoly and the canals were being squeezed out as alternative means of transport, the Parliament was becoming more and more laissez-faire minded. The interests of the public required that railways as a common carrier should be controlled and yet the prevailing ideas about the role of the government required that it should not interfere with private enterprise. But the Parliament again made indecisive attempts to control railways by ineffective legislation. In 1844, a tribunal of five commissioners was appointed to supervise amalgamations. It did not achieve much and was dissolved in 1851. In 1854, again an Act was passed and a body, the Board of Control, was established to revive the competition of canals and to protect the public from discrimination.

in rates by the railways. It also did not prove of much avail.

In the meanwhile mercantile opinion became very critical of the policy of the government. The general public also realised the effects of non-interference of the state and, therefore, became more inclined towards the need for legislative control of railways. Walter Bagehot, who was the Editor of the *Economist*, wrote in 1860: "Granting that state purchase would be exceedingly beneficial, it becomes the plain duty of the Executive Government to enquire whether that transfer cannot be effected". In 1865, therefore, a Royal Commission was appointed to advise the government on the question of state control or purchase of railways. It came to the conclusion, after deliberation for two years, that no change in the status of railways was called for. The period, therefore, ended with the much-dreaded monopoly of railways becoming a reality.

1873 to 1893 *Period of attempt of parliamentary control.*

The idea of nationalisation of railways received a great impetus in this period. The public demand became more insistent. Bagehot wrote: "It is an admitted principle of political economy that all monopolies granted by the state ought to be under the superintendence or correction of the state". The public complained loudly about the practice of discrimination in rates between individuals and individuals and areas and areas. The rising tide of competition from the young industries of Germany and the United States had brought home to the politicians the dangers of free trade policy. In these conditions, the railways approached the Parliament for legislation permitting further amalgamation of railways.

The government, therefore, appointed a Commission to report on the measures necessary for control-

ling railways. On its recommendations, the government established the Railway and Canal Commission and entrusted to it the work of preventing combinations, reviving canals and hearing complaints about preferences. In its early years, it did not prove of much use. The depression of 1873 and subsequent years, however, brought to the forefront the defects of the railway management. The government, therefore, decided to act and in 1888 the Railway and Canal Traffic Act was passed. It made the Railway and Canal Commission permanent and gave it more powers. Discrimination in rates was forbidden and the railway companies were asked to submit within six months of the passage of the Act, a revised classification and schedule of maximum rates. In 1893 the new rates permitted by the government came into force. The railways raised the rates to the maximum permitted. Immediately there was a hue and cry from the public complaining against the effects of this policy of railways on trade. An inquiry was therefore set up by the government and on the strength of its findings, the Act of 1894 was passed which provided that the railways could not raise rates unless an increase was justified. They could do so only in the event of a rise in the cost of management. Hence the Act of 1894 had far-reaching effects on the railway management. All incentive to economy was killed; the managements did not lower the rates even for experimental purposes and competition in rates came to an end.

The period under review, however, is marked by a change in the attitude of the Parliament. It showed that the government had departed from its former stand of laissez-faire and had deemed it necessary to intervene in the management of the railway companies. But it could not summon enough courage to think of the nationalisation of railways which was

demanded by the public at the beginning of the period.

1893 Onwards

This period is momentous in the railway development of England. It witnessed a steep rise in the cost of management resulting from increasing taxation, higher prices of coal and competition among railways to attract traffic by giving better facilities. This very competition brought about further amalgamation among railways much to the annoyance of the government. Many canals were either purchased by the railways or had ceased to function because of their competition. In 1906, therefore, government appointed a commission to report on the possibility of reviving the competition of canals to counteract the monopoly of the railways. The commission recommended that the state should take over some of the canals and deepen them. The railways opposed this move of the government and, therefore, no action was taken on the report. The monopoly of railways, therefore, remained uncontrolled without any further action from the government.

In addition to the effects of monopoly on the trade and industry, the labour on railways began to feel the growing power of the employers. Though trade unionism in other branches of industry had grown in the past, it did not make any striking progress in the railways. By 1892, hardly one in seven workers was a member of a trade union. About this time, therefore, labourers started organizing themselves to improve their conditions of work and wages. In 1897, they demanded an eight-hour day and a rise in wages by two shillings. No heed was paid to this demand until 1907 when the railways responded by agreeing to set up conciliation boards consisting of the representatives of employers and workers. This did not

improve the matters and the workers went on ~~strike~~ in 1911. Though the powers of the conciliation boards were improved to make them more useful, the workers realised that unless they formed a national organization of labour they would not succeed in achieving their aims. In 1913, therefore, they formed the National Union of Railwaymen. Soon after this they demanded, as the means to improve their conditions, that the railways should be nationalised and that they should have a share in their management. Some increase in the wages was given at this time, but the fundamental issues raised by the labour did not receive any attention of the government because the war clouds were already gathering on the horizon and in less than one year the Great War broke out.

During and After the Great War of 1914-18

During the war the railways were put under the control of the government to facilitate the needs of war transport. The railways continued to be managed by their respective private organizations but under the control of a committee of managers presided over by the president of the Board of Trade. The railway companies were given their profits on the basis of the immediate pre-war years.

After the armistice, the railway problem again loomed large in public discussion. The labour party which had now grown strong demanded the nationalisation of railways. The opinion outside the Parliament also was in favour of the demand. After long discussion and deliberation, however, the government decided to maintain 'status quo' in railway management and handed over the railways to their respective private organizations in 1921. But in doing so it brought about extensive changes in the management. It had seen the advantages of combined management during the war and, therefore, it proposed compulsory

merger of lines with sufficient safeguards for the interests of the labour and traders. It may appear a little strange that, when the country was demanding nationalisation of the railways because combination was regarded to be detrimental to the interests of the general public, the government should propose further concentration of management.

By the Railway Act of 1921, the railways were merged into four groups: (1) the Southern covering a mileage of 2,150; (2) the Great Western covering a mileage of 3,750; (3) the London Midland and Scottish covering a mileage of 7,750; and (4) the London and North Eastern covering a mileage of 7,750. The Act provided that any saving which might occur from this merger was to be distributed between the railways and its consumers in the proportion of 20 per cent. and 80 per cent. respectively. In regard to the rates and fares, a Railway Rates Tribunal was set up. It was empowered to fix and, if necessary, vary rates and fares. It could also hear complaints of the traders and merchants in regard to rates and fares. To protect the labour interests, a National Wages Board was to be appointed. It was to consist of six representatives of railways, six representatives of labour and four representatives of the public. In addition, there was to be an independent chairman. The decision of the Board was binding on neither labourers nor employers. Its function, therefore, was more akin to that of a conciliation board. The Board, however, might prove useful in bringing the two parties to a dispute together and giving them a chance to explore common ground of compromise. The Act also provided for the publication of the statistics of operating costs so that the public may be able to judge as to whether or not the railways were being managed economically.

The above Act was given effect to from 1st January, 1923. The new rates came into force from 1st

January, 1928. The working of the railways since the changes made by the Act of 1921 has not fulfilled the expectation of the government. The competition between the railways in the different groups continues unabated because of the over-lapping of territories served by the railways of the different groups. The prosperity expected for the railways has also not been realised because of the post-war depression, high and rigid labour costs and the advent of the competition of the road transport. The English industries and foreign trade declined during the post-war years and never regained their pre-war levels. This decline affected the railway earnings adversely. Further, during the war years, the wages had risen substantially, but in the post-war years, it became difficult to reduce them because of the opposition of the strong and powerful trade unions. In 1932, an appeal was made by the railways to the National Wages Board for a reduction of wages. The workers opposed the request on the ground that workers' wages ought to be the first charge on the earnings even though it may mean a fall in dividends. The railways could get no relief in this direction.

The last factor which affected the earnings was the competition of the road transport. During the war private motoring was very much restricted. When the war ended, the competition of motor transport revived, perhaps with greater vigour than before. The railways complained that they were at a disadvantage compared to the motor transport in three respects: (1) while they were subjected to stringent public regulation though they used the track owned by them, the motor transport was more free in this respect though it used the public roads; (2) though motor transport was taxed, taxation was not commensurate with the cost and upkeep of the roads; (3) the railway rates were controlled by the government

while motor transport in this respect was comparatively free. The railway companies, therefore, demanded that motor transport should be regulated more stringently.

The government responded to this request by passing the Road Traffic Act of 1930, which gave powers to the Traffic Commissioners to license motor cars, to regulate time tables and routes and in general to control motor transport. As this did not bring any relief to the railways, in 1932 a Rail-Road Conference was called under the presidentship of Sir Arthur Salter. The conference recommended to the government stricter licensing of road transport companies, taxation in proportion to the wear and tear of roads, and control over the conditions of labour employed by them. Even changes in these directions did not give any relief to the railways and their earnings continued to decline. The decline was perhaps the highest during the peak years of the depression. For 1931 and 1932, the annual decline was in the neighbourhood of £14 millions. Of course an attempt was made to introduce economy in management, yet on the whole the railways could not be said to have enjoyed prosperity in the post-war years.

In the most recent years, however, in spite of competition the railways have been able to hold their own against the motor transport in the carriage of bulky goods and the long distance passenger traffic. An attempt also has been made to electrify the railways to quicken services. But these factors have not been adequate to improve the finances of the railway companies. There is still some amount of competition among the four groups. Hence there is a possibility that the four groups may be combined either into a single private company or a department of the government. The Labour Party has not given up its demand for state ownership of railways. The future

alone will show which course the government would adopt.

✓Development of Shipping

The English prosperity resulting from the Industrial Revolution could not have been so remarkable merely with the development of railways if shipping had not undergone the changes of the nineteenth century. External means of transport were as vital to the success of the industrial development as the internal ones. The English industries were built on the supply of many raw materials from foreign countries; they were equally interested in foreign markets because their capacity of production was in excess of the ability of the home market to absorb goods. Shipping development, therefore, was vital in both the respects. In addition, from the political point of view England needed an extensive navy to hold down the colonies as a part of the British Empire. Moreover, during war the very existence of England depended on an efficient shipping. This is enough to show how the very life of England depends on the possession of good shipping.

That England realised the importance of shipping is manifest from the studied attempts of the Mercantilists to bring about its development. Though England possessed considerable shipping in the Middle Ages, ships were generally of small size. The Dutch who also possessed considerable shipping earned good profits from the carriage of goods between nations. The Mercantilists realised that shipping was not only vital to the defence of England but, if developed, would be able to encourage English trade and also share with the Dutch in the profits of carrying trade. Inspired by these lofty aims, the government took measures more popularly known as the Navigation Acts. The earliest of the Navigation Acts was passed

In 1381. In the following centuries, the policy, to be explained presently, initiated by this Act was continued and strengthened by the passage of similar measures. This policy, however, had aroused the resentment of other nations and Elizabeth repealed the Acts in 1559. But the freedom of shipping did not continue for long and very soon the state returned to its old policy. The subsequent laws, proclamations and orders passed by the Parliament did not become completely effective until they were re-enacted in the Acts of 1651 and 1660 and provision was made for their enforcement. These latter two Acts governed the shipping policy of the state until the middle of the nineteenth century.

The chief provisions of the Navigation Acts were that: (1) foreign ships were restricted to certain lines of trade only; (2) in the European trade, certain commodities only could be brought in foreign ships, but in such cases the port and pilotage charges and custom duties were higher; (3) the trade between England and her colonies was restricted to either English or colonial ships; (4) the coasting trade was restricted to English ships only: and that (5) the English ships had to be built in England and they had to have English captain and also three fourths of the crew were to be of the English nationality.

The English shipping no doubt received considerable encouragement from the Navigation Acts. It ruled supreme over the seas in the 17th and the 18th centuries. But this very supremacy aroused the jealousies of other nations and at the beginning of the nineteenth century they threatened with similar action on their part. The English shipping policy, therefore, was shrewdly relaxed by stages. Between 1824 and 1843, the Crown was empowered to negotiate treaties with other countries on reciprocal basis. Such treaties were negotiated with Prussia,

Denmark and other countries. Similarly, about this time the colonies were allowed to trade directly with foreign countries, but the inter-imperial trade was still reserved for the English or colonial ships. These changes made the working of the Navigation Acts difficult and to keep them on statute merely was to rouse the feelings of others against England. The free trade movement also was gathering strength at this time and, therefore, finally it was decided to repeal the Navigation Acts in 1849. Conditions regarding the crew were repealed in 1853 and even the coastal trade was thrown open in 1854. Thus after nearly 473 years English shipping was freed from governmental control probably after its purpose was achieved.

This freedom of shipping coincided with great changes in the construction of ships. Though steamships were constructed as far back as 1802, the real development came after the middle of the 19th century when wooden ships were replaced by iron ones. In the last quarter ships of steel were constructed. The technical developments achieved further success in the construction of oil tankers and refrigerator ships. In addition to these successes, the opening of the Suez Canal in 1869 provided a shorter route to the Eastern countries and gave a stimulus to the shipping industry.

Thus the technical developments of less than half a century gave a decisive lead to England in the shipbuilding industry and the carrying trade of the world. In this development, the availability of coal and iron in England have played no mean part. After 1870, it is estimated that the shipbuilding industry gave employment to nearly 200,000 workers and accounted for an output of nearly £50 millions. On the eve of the last Great War, England possessed 12.4 million tons of shipping out of a total of 26 millions of world ton-

hage. England also carried about 52 per cent. of the world's seaborne trade.

The success of England in shipping aroused as before the feelings of jealousy in other countries where a tide of nationalism was urging the people towards a full-blooded economic development as a necessary pre-requisite to maintain their independence. Many countries encouraged shipping. The lead was given by France and was followed by other countries like Germany, Italy, Austria, Hungary, Japan, Russia, Denmark, the U.S.A., Spain and Belgium. They gave many concessions to the shipbuilding industry. These were: (1) bounties on construction or mileage worked; (2) special railway rates; (3) reservation of coastal traffic to national shipping; (4) payment of the Suez Canal dues; and lastly (5) loans and exemption from taxation. Among the many countries which encouraged shipping in the above manner before the War, Germany succeeded more than others. The last quarter of the nineteenth century, therefore, witnessed a great increase in the world tonnage and consequent competition among the shipping lines. The result was a depression in the shipping industry. The English shipping suffered from internal as well as external competition. Among the devices which were readily adopted by it to meet with the competition, were combination amongst rival lines, shipping conferences to prevent a further fall in rates and fares and the system of deferred rebates. An attempt also was made to include the German interests in the shipping conferences. To some extent this helped the English shipping lines to hold their own against the foreign competition for some time.

The position which English shipping achieved before the Great War was due to a number of factors. Firstly, the industrial development of England for

nearly a century before the great discoveries in the construction of modern ships had led to the establishment of a number of firms which were in a position to supply the multitude of component parts required by the ship-building industry. And in this matter the possession of coal and iron in abundant quantities proved very helpful. Secondly, the ships were built like the railways by private enterprise. The capital necessary for the purpose was mobilised by the vigorous development of banking in the nineteenth century. Thirdly, England possessed in the Lloyds organization, started as far back as the 17th century, an institution which could undertake to insure the risks attached to sea voyage. It was reorganized in 1871. In addition to undertaking the business of insurance, the Lloyds were useful in diffusing shipping knowledge among the public. Unlike other countries, the English government, however, did not play a direct part in the development of shipping in the latter half of the 19th century. This was the result of the laissez-faire policy which it adopted in the middle of the century. A change, however, began to be seen in this policy in the closing decades of the century. In 1871, some supervisory powers were given to the Board of Trade. By the Merchant Shipping Acts of 1875 and 1876 certain conditions of the seaworthiness of vessels were laid down. The law relating to shipping was recodified in 1894. But with the increasing depression in shipping in the last quarter of the 19th century the public showed itself to be more critical of the 'police' functions of the state and wanted it to play a more intimate role in the development and preservation of English shipping like the German government. The government, however, did not change its policy, though on some occasions it helped the shipping companies with loans. Thus the state helped the Cunard Company with a loan in the

construction of the Mauretania and the Lusitania in 1903. Between 1900 and 1910, the government also gave a subsidy of £40,000 for the development of trade between England and the West Indies.

During and After the Great War

During the last Great War English shipping suffered heavy losses from the enemy submarine attacks. England lost nearly 8 million gross tons. A shortage of shipping was felt and the rates were rising. The government, therefore, established new shipping yards and finally put shipping under its control in 1916. Though new ships were constructed in the war period, England came out of the war with less floating tonnage than before it.

In the post-war period, the position of shipping has been affected more adversely. Other countries have encouraged their shipping industry. The world tonnage which was 26 millions in 1914 had increased to 64 millions. The competition of Japan in the Eastern waters, of Italy in the Indian ocean and the Mediterranean and of the United States in the Atlantic has deprived English shipping of a good deal of world's carrying trade. The depression in the post-war years and the mounting tide of economic nationalism has also led to a shrinkage of international trade. The combined effect of these two factors has been to bring about a decline in the invisible exports of England on account of shipping. The development of air transport for commercial purposes also forebodes adversely for shipping. In recent years, the development of aerial warfare clearly indicates against shipping being the most important accessory of successful warfare. In the case of England, however, shipping would still be important because of its services in bringing food to the Englishmen. To-day English shipping is in a desperate plight. Its future depends on the future shape of the world economic conditions.

Chapter IV

THE COMMERCIAL REVOLUTION^{*}

Before 1750

In the early Middle Ages, commerce as we understand it to-day did not hold an important position in the economic organization of the countries of Western Europe. Local needs were supplied by local production. They, however, had a limited trade with the East. Whatever commodities these countries imported from the East came through generally along the land routes. Hence the Mediterranean was the pivot of European commerce. But the geographical discoveries of the fifteenth century shifted the centre of commerce from the Mediterranean to the Western sea-board of Europe. In 1492 Christopher Columbus sailed West to reach the East and by chance struck against the new world. In 1497 the Cabots landed on the mainland of North America and Vasco de Gama sailed round the Cape of Good Hope and reached India next year. These discoveries established a new relationship between Europe and the outside world. The economic organization of Europe reacted admirably to these epoch-making discoveries and the foundations of a new era of commerce and prosperity were laid at this time. With the beginning of the sixteenth century the organization of commerce underwent fundamental changes along four lines: 1) the opening up of vast trading areas to which the new trade routes provided an access; (2) the establishment of the great trading companies to undertake large scale operations; (3) the introduction of national in place of local commercial policies; and 4) the expansion of currency, banking and credit to

facilitate the even flow of trade. These four aspects will be discussed briefly in the following pages.

The place which England came to occupy in these changes is significant. The early geographical discoveries were not made by Englishmen. Spain and Portugal whose sailors had discovered the new routes started colonising the new territories and establishing their trade. But the success of these countries excited the imagination of the English adventurers and an attempt was made by them too to carve out a name for their country in the annals of history. They wanted to find out like others new routes of trade and, therefore, embarked on the mission. In the early years of the sixteenth century, the English ships visited the fisheries of New Foundland and in 1530 William Hawkins reached Brazil. But not until the days of Elizabeth did the English achieve anything great. In 1553, Sir Hugh Willoughby and Richard Chancellor set out on a journey to find a north-east route to India. Instead of finding the route to India, which as is known does not exist, Chancellor reached Archangel in Russia and succeeded in concluding a trade treaty with Moscow. Thereafter expeditions were led by Frobisher, Davis, succeed in finding any new trade routes. Spain and Hudson, Baffin and James but they did not Portugal continued to reap the advantages of the new discoveries. The English, therefore, entered on struggle with the Spanish and the Portuguese to wrest for themselves the advantages of trade and mainly concentrated on piracy to attack the trade of their rivals. This rivalry was also inspired by the religious differences between these countries. The struggle was finally won by England after the defeat of the Invincible Armada of Spain in 1588 by the English sea power. Thus the English now were free to trade with other countries.

In addition to the geographical discoveries, a number of inventions were made in the field of navigation. For example, nautical instruments were invented which made long and risky journeys on the seas more safe than before. Among these inventions, to mention a few only, were the mariner's log and the chronometer. Further ships of a larger size and better seaworthiness began to be constructed.

These discoveries of the fifteenth and the two subsequent centuries were momentous in the history of the world. Before them, the European commerce, small in size, consisted mainly in the exchange of goods with the Asiatic countries. The commodities entering trade were, because of the difficulties of transport, few, very expensive and mainly meant for the consumption of the rich. The articles referred to above were chiefly spices, silk, tapestries, precious stones, perfumes, etc. The discovery of the new trade routes opened vast areas of trade in the New World, the East Indies and the Oriental countries. The number of trading companies which were formed in England alone, and which are discussed below, give an idea of the fillip which the discoveries gave to commercial enterprise. In a few decades, the European, and the European-Asiatic commerce expanded into world commerce. The commodities entering it also increased in scope and quantity. In place of a few articles mostly consumed by the rich formerly, a variety of goods began to be exchanged between countries for the use of the rich and the poor alike. These were the beverages like tea, coffee, and cocoa, fruits like lemons, oranges and pineapples and undry articles like rugs, carpets, furniture and earthenware. These goods appeared in the houses and in the tables of the lowest classes for the first time and brought about a change in their tastes, habits and standard of life.

Thus the opportunities of commerce which were opened at the beginning of the sixteenth century, may be by the efforts of the Spanish and the Portuguese, were seized upon by the enterprising merchants in England. To exploit these opportunities fully, the government as well as the public encouraged the formation of trading companies in preference to individual traders. The reasons which weighed in their favour were many. Firstly, it was felt that the long distance trade on the seas was open to dangers natural and otherwise and that a company would be able to forearm itself against these better than an individual and that if losses were incurred, unlike the individual, a company would be able to bear them without any serious consequence to its ability to pursue the enterprise. Secondly, a company rather than an individual would be in a position to secure concessions for trade from the rulers of countries with which trade was carried on. Thirdly, an individual through greed may stoop to dishonest trading practices but a company would not generally do so. A company might be able to build up, while an individual might harm, the reputation of the home land in foreign countries. If the latter happened, the future prospects of trade might be ruined. Fourthly, the government favoured the plan because it was easy to realise taxes from companies and the chances of their being defrauded were few. Thus for these and other minor reasons the individual was discouraged and the new era of great trading companies was ushered in.

There were two types of companies formed at this time. One was the Regulated Company and the other the Joint Stock Company. The regulated company was an association of traders formed under a charter of the Parliament. Each member trader traded individually and enjoyed himself the profits arising from such trade. He, however, paid his contribution towards the

upkeep of the company's agents and stations abroad. He also accepted the control of the company as embodied in its rules. But the company as a whole did not trade. The joint stock company, ~~which~~ the one of to-day, was an organization permitted by the Parliament and brought into existence by the contribution of capital by a number of investors. The ~~same~~ was carried on in the name of the company and the shareholders shared in the profits and losses in the proportion of the capital contributed by them. In the course of time the regulated as well as the joint stock companies tended to assume monopoly rights in their trade with certain areas. Entry of new traders into companies was more free in the case of the joint stock companies than regulated companies. The members of the latter regarded their organization as more or less a close corporation and barred the entry of new members. The regulated companies, therefore, came in for a good deal of criticism. With the passing of time, therefore, the rights of these companies were gradually restricted and finally in the nineteenth century abolished.

The Merchant Adventurer was the most important of the regulated companies. After a long time of its existence, it was incorporated by a royal charter in 1564. It traded with the Rhine and the Elb. It also played a great part in the Civil War leading to the defeat of Charles I. After the successful voyage of Chancellor, the Muscovy Company was chartered in 1555. It traded with Russia, Persia, Armenia and the Caspian. During the seventeenth century its trade declined because of the competition of the Dutch and the disfavour of the Tsar. Trade with the Muslim countries of the Mediterranean was carried on by two companies, the Barbary Company and the Lavan Company. The first did not succeed and the latter after a chequered career surrendered its privilege.

1825 when the trade with these countries was thrown open to all. By far, however, the most important company of this period was the East India Company founded ~~in~~ 1600. It was first started for a joint adventure but later on it organized itself as a permanent joint stock company. It had a monopoly of trade with the parts of Asia, Africa and America and in the Indian and the Pacific oceans from the Megellan States to the Cape of Good Hope. It traded mainly in cloth, hardware and glass. As the Eastern trade required the export of specie, it had, in spite of Mercantilist doctrine, the privilege to export bullion. In India, however, it departed from the mere commercial role and tried its hand at the political game and to the astonishment of many succeeded in securing territories. Its political activity was later on controlled by the Parliament under the Regulating Act of 1773 and the India Act of 1774. The company was abolished in 1858 when the Parliament assumed the direct control over India. Thus the inauguration of a number of joint stock companies was the most important aspect of the commercial revolution of this period. They marked the beginning of large scale business and but for them the European commerce would have remained small in scope and extent. They also succeeded in establishing trading connections all the world over which proved very useful to England when the Industrial Revolution occurred.

3. The third aspect of the commercial changes of this period was the development of national policies. In the Middle Ages, because of the lack of transport facilities, villages and towns were more or less self-sufficient. The control of industry and trade was local in character. There was little national feeling and national policies were characteristically absent. Towards the end of the Middle Ages, however, there was sufficient increase in the power of the Crown. The

trade of the country also began to develop. It was, therefore, legitimately felt that local control would not be conducive to national interests and hence the state gradually assumed power over local as well as national interests. This tendency became more pronounced in the seventeenth and the eighteenth centuries and came to be described by the term Mercantilism. It is not necessary here to dilate more on this aspect as its implications have been fully discussed in the first chapter.

The last aspect of the commercial changes was the increase in currency, banking and credit. So long as trade was limited in size and scope, their importance though not underrated, was not keenly felt. With the changes of the sixteenth and the seventeenth centuries, trade expanded beyond the boundaries of a nation to distant countries. The magnitude of trade also changed. The currency requirements of traders increased correspondingly. At this time the circulating medium in the European countries mainly consisted of coins made of gold and silver. Their amount could be increased only if the production of these metals increased. An attempt was no doubt made to increase their production in Europe and Africa, but not until the beginning of the seventeenth century when they began to be produced in America, the demand could be fully met. The figures of world production between 1493 and 1760 clearly show that the production rapidly increased in the years beginning with the seventeenth century.

World Production *

	Gold (In million dollars)	Silver
1493-1520	108	55
1521-1560	205	297
1561-1600	189	597
1601-1640	224	679
1641-1680	240	585
1681-1720	313	580
1721-1760	581	802
Total ..	1860	3595

This influx of gold and silver among other factors had far-reaching effects on the economy of European countries. England could not escape from its effects. It brought about a rise in prices. But as wages were controlled by the state, it gave higher profits to the industrial and merchant classes. Accumulation of capital and its investment in stocks and speculation were no doubt the results of the increased circulation.

The development of banking and credit came much later in England than in other countries. While Venice, Genoa, and Amsterdam possessed banking institutions for quite a long period, in England the banking services, to use a modern phrase, were supplied mainly by the goldsmith bankers. Though attempts were made to start a regular national bank to help the growing commerce of England about the middle of the 17th century, these attempts failed to materialise because, among other causes, of the indiscretions of the monarchs. The English had, therefore, to make use of the services of other countries. After

the revolution of 1688, when the limited monarch was established and William III was in need of funds to finance wars, the Bank of England was incorporated in 1694. The foundations of modern banking were laid in this year and in the next two centuries England came to possess a banking system of the highest eminence. By 1750 there were 12 banks outside London. The notes of the Bank of England and the private bankers freely circulated and supplied the needs of growing commerce for a credit currency. The rate of interest also declined from an average of 7 to 8 p.c. to 4 p.c. The bill of exchange long familiar as a credit document began to be used on a large scale. Though England did not possess at this time a regular bill market, its use was facilitated by a class of persons known as Scriveners who engaged themselves in the business of bringing together borrowers and lenders of money against bills.

Another interesting aspect of the financial developments of this period was the beginning of business in stocks of joint stock companies. It has been already mentioned that joint stock companies were started in England for trading purposes. At the end of the seventeenth century, England and Scotland together possessed about 140 joint stock companies with a total capital of £4,250,000. Speculation in the shares of these companies became the occupation of not a few persons. The share prices fluctuated widely. Thus the shares of the East India Company declined from £200 to £37 between 1692 and 1697. How speculation was increasing in England was shown by the history of the South Sea Bubble companies. In spite of the early difficulties in the development of banking and credit and their use in speculation, it must be admitted that they were immensely useful in the growth of English commerce.

The statistics of the foreign trade of England in

this period though scanty show the combined effect of the changes mentioned above. In 1700 the total volume of England's exports was 317,000 tons; it increased to 661,000 tons in 1750 and 1,958,000 tons in 1801. The average value of imports and exports between 1698 and 1701 was £5,500,000 and £6,400,000 respectively. In 1801 the respective figures were £31,400,000 and £41,400,000.

In the foregoing paragraphs mainly the changes in the foreign trade were discussed. The home trade organization may now be described briefly. In the seventeenth and the eighteenth centuries though changes occurred in the nature of trade, its organization remained substantially medieval in character.

The trade of England was carried on through a number of regional markets. They were usually in the form of weekly, annual or bi-annual fairs held in the important towns. People from the neighbouring areas who had either to sell or buy assembled at these fairs.

Quite frequently traders from distant regions travelled to these fairs. But none of these towns with the exception of London could boast of a constant touch with the whole of the country. Lack of good communications thus limited the size of markets. Some of these fairs which were periodical were held for a fairly long time and during their continuance the place would bear the appearance of a town. Among such fairs were those which were held at Stourbridge, Winchester, Boston and Beverley. The outstanding characteristics of the trading at these fairs were that bargains were struck in the physical presence of goods and without middlemen. There were few retail shops as the producers sold directly what they produced. Approximately 75 per cent. of the home trade of England was done through these fairs. Besides these there were in a few places special markets in which the products of the local industry

were sold. Such markets existed in Leeds, Bradford, Huddersfield, Wakefield and Halifax. It was also noticed that a certain amount of trade was carried on by travelling merchants and pedlars. The last mentioned trader usually carried on a horse ~~pick~~ an assortment of goods of various kinds and visited the countryside. This organization of the home trade was typical of the period before the Industrial Revolution. But when the means of communication underwent a change, after the advent of the Industrial Revolution, the organization of the home trade adapted itself to the changing conditions.

After the Industrial Revolution

The success of the Industrial Revolution with its large scale production depended as much on the change in the means of transport as on the change in the methods of commerce and the habits of people. The construction of better roads, artificial waterways, railways and, in the last quarter of the nineteenth century, the steamship necessitated a transformation in the methods of commerce which could be well described by the word revolution. The outstanding characteristics of this revolution are three : (1) expansion, (2) specialisation and (3) integration.*

The introduction of railways and the steamship as the means of transport and the telephone and the telegraph and latterly the wireless as the means of communication has brought the countries of the world into intimate contact with each other. The traders in the different parts of the world are in continuous contact with each other. In the same period, commodities have been standardised. This has enabled sales to be made by description. A certain code of business morality has also been evolved which the

* Birnie, *An Economic History of Europe*, pp. 61-62.

traders willingly follow. These developments have brought about a great change in the methods and organization of sale. Goods are sold by samples or by mere ~~description~~ for spot or future delivery. The actual physical presence of goods in the markets is not necessary. This method of sale has enabled the development of the great produce exchanges. They help the movement of huge quantities of food grains and raw materials produced in the various countries of the world. The constant touch between these exchanges equalises prices and a world price for a world commodity has become a reality. The local markets for certain commodities evolved into prominent national and world markets.

The development noticed in the staples of world trade did not occur in the case of manufactured goods. They are generally less standardised than the chief staples and the variety of their production is so numerous that sales by mere description may not be always possible. The manufactured goods, therefore, usually reach the general public through the wholesale and the retail merchants with a chain of intermediaries.

2) The second characteristic of the commercial changes is specialisation. The first change which is noticed in this direction is the separation of industry and commerce into two distinct functions. It is no more a practice for the industrialist to take his goods round, exhibit them for sale and strike bargains with buyers. The industrialist studies the nature of demand through his market experts, decides on a line of production, concentrates on it and leaves the work of finding a market to the chain of commercial intermediaries. Further the commercial organization itself has been divided into branches on specialised lines. One branch is the wholesale and the other is the retail. The work of the first is to buy in bulk and sell in

smaller quantities to the retailers. The latter sells it still smaller quantities to the general public. The produce exchanges in the staples of commerce have also developed along specialised lines. Thus there are cotton exchanges, wheat exchanges and rubber exchanges which deal with only one commodity. Lastly the function of buying has been separated from selling and there are traders who engage themselves in one or the other of the two functions but not generally in both. The division of commerce on these specialised lines has given rise to a class of middlemen known as mercantile agents. Their work is to help their principals in making sales or purchases.

③ The last feature of commercial changes is the most recent tendency towards integration. With the spread of industrialisation in many countries and the improvement in the means of transport, the competition among producers has become keen requiring a much economy in sale as in production. A tendency has, therefore, developed in recent times to combine into one activity functions which were formerly sharply divided into many. The development of the departmental store is an example of this nature. It combines in itself not only the work of many retail shops but also of the wholesale dealers. The merchant also has invaded the field of production as in the case of the wholesale co-operative society which undertakes production of cloth, boots and shoes, etc. Because of the same forces the manufacturer has encroached on the field of traders. In America and on the Continent, they have established their own shops which are known as chain stores. With their help they have eliminated the wholesaler and the general retailer. They deal directly with the consumer. This has exhibited how commercial methods react to changes in the economic forces. It may be possible that with still keener competition and with

unequal distribution of wealth commercial organization and methods may undergo further changes.

The external commerce of England which has increased in the two previous centuries assumed unforeseen dimensions consequent upon the industrial changes, the revolution in the means of transport and communication and a change in the commercial policy. This was helped in no small degree by the Empire which England had succeeded in building in the previous centuries. The growth of English trade in the latter half of the nineteenth century is shown by the following figures*:-

Years	Average imports in million £	Average exports in million £	Average re-exports in million £
1855-59	146	116	23
1860-64	193	138	42
1865-69	237	181	49
1870-1874	291	235	55
1875-1879	320	202	55
1880-1884	344	234	64
1885-1889	318	266	61
1890-1894	357	234	62
1895-1899	393	238	60
1900	460	283	63

(i) Among the characteristics of England's foreign trade in the latter half of the nineteenth century, the most striking one is the change in the character of trade. With the establishment of factories the export trade came to consist mainly of manufactured goods. The chief articles of exports consisted of textiles, machinery, coal, chemicals and pottery. The imports instead of consisting of

* Ogg and Sharp, *Economic Development of Modern Europe*, p. 253.

Oriental luxuries mainly consisted of raw materials and food grains. This revolution in the character of trade was the result of the change brought about by the Industrial Revolution. The second characteristic is the rapid growth in the volume and value of trade. In 1802, the exports and imports were valued at £41 and £31 millions respectively. In 1900, the same figures increased to £283 and £460 millions respectively. The achievements of the Industrial Revolution are amply borne out by these figures. It must, however, be stated that this rapid growth was not always continuous and uninterrupted from year to year. There were years in which the trade received setbacks. Among such periods were the years between 1875 and 1879 and between 1888 and 1889 which were years of depression. The third characteristic is the more rapid increase in the imports than exports. This is explained by the fact that part of the imports of raw materials were used for the production of manufactured goods to satisfy the home market. But more probably the divergence in the rate of expansion of imports and exports seems to be the result of the increasing dependence of England on foreign countries for the supply of food material to her growing population. Further the slackening speed of exports in the last quarter was also due to the rise of new competitors in the field of industrial production. England paid for the excess of her imports from her receipts for invisible exports.

The period after 1900 and before the Great War saw an unprecedented growth of trade in spite of the fact that there were more industrialised countries than before. This prosperity was enjoyed not only by England but by nearly all the countries of the world. The explanation of this phenomenon could probably be found in the extension of industrialisation to the distant countries of the world and the facilities pro-

vided by the growth of insurance, banking and shipping. The peak point of England's foreign trade was reached in 1913 when exports and imports were valued at £525 and £769 millions respectively. In the post-war period, as will be seen later on, the foreign trade of England received a set-back and had been unable in spite of strenuous efforts, to regain its former volume.

This growth of England's trade before the Great War has been helped in no small measure, among other things, by the development of English banking, insurance and shipping. In fact, they have played a double role. They have facilitated trade and by the services to other countries, have helped to reduce England's unfavourable balance of trade. The English banking which had developed round the Bank of England was lopsided before 1825. Crises were frequent. Since that year changes were introduced in the law relating to the establishment of banks. In the Acts of 1826 and 1833 joint stock banking was encouraged. The tone of banking institutions was improved by the application of limited liability and reserve liability principles by the Acts of 1858, 1862 and 1879. This led to the development of sound credit institutions which on the one side collected the savings of the nation and on the other helped the trade and industry. The note currency of England was regulated by the Act of 1844 and in the second half of the nineteenth century, the Bank of England succeeded in developing a technique of controlling credit. The traders, therefore, could depend on banks for credit facilities at fair rates of interest. England also developed in this period, more by accident than design, the bill market and the acceptance business. The presence of a sound banking system, the acceptance houses and the bill market gave London the place of pre-eminence in finance. The trade of man-

countries began to be financed through London.

In this rise of London as the clearing house of world trade, the Lloyds organization, which was reorganized in 1871, and the increasing strength of English shipping also have played their part. The change in the commercial policy of England from protectionism to free trade after the removal of corn duties in 1846 and the continuance of this policy in spite of opposition till 1932 no doubt gave an encouragement to foreign trade. Thus in the nineteenth and the early twentieth centuries, not only England's trade increased but she was carrying and financing the trade of other countries.

Chapter V

PRINCIPAL INDUSTRIES

The Industrial Revolution gave rise to a number of factory industries. They are the textile, coal, iron and steel and engineering industries. In the latter half of the nineteenth and the early twentieth centuries many more industries were started or expanded among which mention may be made of the shipbuilding, chemical, electrical and motor car industries. This list is not certainly complete as there are a number of other industries quite important in their own way. It would not be possible to discuss all these industries in a brief chapter like this. Hence it is proposed to devote the following pages to the study of the three principal industries, cotton, iron and steel and coal.

Cotton Industry

Of all the changes brought about by the mechanical inventions of the 18th century, the revolution in the cotton trade of the world was the most striking. Until the 18th century, cotton manufacture was mainly localised in the East and cotton goods were largely

in use in the tropical countries. With the inventions of the 18th century, the industry migrated to the West and cotton fabrics began to be used in the European countries. The West began to export cotton goods for use by the people in the East and the competition of these machine made goods killed the local industry which did not adapt itself to the changes in technique. The twentieth century has again witnessed the overthrow of the dominance of the Western cotton textile industry by its growth in India, Japan and China. Indeed, the study of this industry would be found to be romantic if one could go into its details.

India was the early home of the cotton textile industry. From there it migrated to other countries. It seems to have appeared in England about 1535. It was established round Manchester. Though thereafter it made some progress and cotton goods were exported from England, the industry was in the handicraft stage and its size was small. The consumption of cotton in this industry in 1700 was only 2 million pounds. Even by 1750, its production was limited.

But the invention of flying shuttle by Kay in 1733 increased the capacity of the handlooms to produce goods. But hand-spinning could not satisfy the increased demand. This directly led to the inventions in spinning in the latter half of the 18th century. Hargreave's spinning jenny, Arkwright's water-frame and Crompton's mule, inventions made in less than twenty years' time increased the speed of yarn production. James Watt's steam engine which was patented in 1769 was applied to the spinning side in 1785. Thus spinning passed into the factory stage about this year. Weaving side took a longer time to pass into the factory stage. The first power loom was invented by Cartwright in 1785. The first iron loom

was built in 1803, but it did not become popular until 1820. By this year weaving became a factory industry. Thus in less than half a century, the cotton industry passed from the cottage to the factory stage. Yet the handloom industry of England as that of the Continent did not die out immediately, but continued its existence till 1860.

The rise of the cotton mills created problems which were also solved favourably for England. One such problem was the supply of raw cotton. England did not produce a pound of cotton. She imported from outside. But then import on a large scale could be possible only if some device could be found by which cotton could be pressed conveniently into a small size to save shipping space. Whitney invented the ginning process in 1793. Thereafter American cotton began to be imported on a large scale. By 1832, of the American exports of 300 million pounds of cotton, England took nearly 220 millions. The price of cotton also fell to one-fourth of the price in 1798. The second problem was one of finding markets for the large scale production. The success of England in the colonial rivalry gave her hold on a number of colonies among which was India. The trade with India was thrown open to all Englishmen in 1813 and the import duties were kept low. The figures of imports of cotton goods into India will show how the market expanded.

	Yarn	Cloth
1815	—	800,000 yds.
1830	3,000,000 lbs.	45,000,000 yds.

Thus England developed the cotton textile industry partly by her skill, industry and enterprise, partly by the accidents of her natural resources and geographical position and partly by the success which she achieved in the struggle for colonies. By the end of the third decade of the 19th century, therefore, t

Industry was well-established. In 1833, there were 150,000 power looms in working and the consumption of cotton had reached 300 million pounds. There were 1,262 cotton factories employing 220,000 workers.

After this experimental stage, the industry continued to make progress. It came to be localised more and more in Lancashire with the result that by the time of the last Great War, of the workers engaged in the industry, 85 p.c. were in Lancashire. The localisation was the result of many factors among which mention may be made of the suitable climate, abundant supplies of coal and convenience for export. But for the setbacks which the industry received temporarily during the American Civil War and the depressions of 1875-79, and 1885-89, it made a rapid progress. On the eve of the Great War, it accounted for 59 million spindles, 805,000 power looms, 2.000 million pounds of consumption of cotton and 620,000 workers. On the export side, it accounted for nearly one-fourth of the total exports. It ranked first in the cotton textile industry of the world with 39 p.c. of the world spindles, 29 p.c. of the world looms and 65 p.c. of the world cotton trade. Its chief market was British India which imported nearly 44 p.c. of the cotton textile exports from England. The success of England in this industry was so remarkable that it was believed that "at this time a man who could not make cotton pay had to be in some way mentally deficient."

With the outbreak of the war the progress of the industry came to an end. During the war its production suffered because of the difficulty of importing raw materials and despatching finished goods. The industry, because of these troubles, was put under the control of the Cotton Control Committee between June 1917 and February 1919. It rationed cotton and where necessary sealed the machinery. Because of

the shortage of tonnage, its markets were also lost to the competitors.

There was a temporary boom in the industry at the end of the war as the demand from the Eastern markets reappeared. But this was only a temporary phase. From 1920 the industry began to decline and the decline could not be stopped over the last few decades. By 1924 the production of yarn and cloth declined 30 p.c. and 33 p.c. respectively as against the production in 1912. The employment also fell from 620,000 in 1911 to 572,000 in 1924. Thereafter the world conditions improved as currencies were stabilised and the problem of war debts was resolved, but this industry like many others in England did not share in the prosperity. By 1930 the production fell by another 40 p.c. from the level of production in 1924 and the employment further declined to 555,000.

An investigation in 1927 showed that the desperate position of the industry was due to the loss of foreign markets, mainly in India, China, the Balkans and the Near East. They took between them 67 p.c. of the exports of cotton goods from England in 1913. In 1929, as against the level of exports in 1913 the loss in the Indian, the Chinese, and, the Balkans and the Near Eastern markets amounted to 58, 71 and 53 per cent. respectively. This loss has been largely due to the growth of local industry in India and China and the growing competition of Japan. In 1914, while England supplied 71 p.c. of the Indian market, the local industry supplied only 27 p.c.; in 1930, the position was reversed and while the local industry supplied 56 p.c., England supplied only 29 p.c. of the market. In the same period Japan increased its exports to India and captured a part of the market which England lost. In China, between 1913 and 1921 England's share of the market declined from 56 p.c. to 22 p.c., while that of Japan increased from 18 p.c.

to 67 p.c. In addition, the Chinese industry which was partly under the control of Japanese capital made a rapid progress in the post-war period. In the Balkans and the Near East, the competition of Japan and Italy with Lancashire became serious. Thus the post-war depression in the industry was no doubt largely the result of the loss of the former markets of England.

The decline of the industry, instead of being arrested, became more serious after the onset of the Great Depression of 1929-33. The average exports of piecegoods in 1932-33 were only 33 p.c. of the average level of 1910-13. This serious decline was no doubt immediately brought about by the fall in the purchasing power of the agriculturists in the East who were faced with a 60 per cent. fall in the prices of agricultural goods. It cannot be also disguised that the decline was aggravated by the strong competition of Japan which resorted to currency depreciation after she left the gold standard in 1931 and by the mounting production of the local industry in India. Between 1929 and 1933 the Indian production increased from 2,357 to 3,200 million yards. The English manufacturers and the government therefore had to put their heads together to devise means of arresting the total extinction of this once great industry. But it may be mentioned that in spite of their schemes, the industry has not shown much improvement.

An attempt now may be made to sum up the causes of the decline of this industry in the post-war period. It seems that the inevitable cause of decline is a change in the factors responsible for the localisation of the industry. England could develop the industry in Lancashire far away from the sources of raw materials and markets because the revolution in transport had brought both of them within her easy reach and because the Eastern countries were slow in

industrialising. But now the Eastern countries have started developing their industries. The cotton textile industry there which possesses natural advantages in the abundant supply of raw cotton and the presence of large market in the East has made the most remarkable progress in the last three quarters of a century. The factor of transport which helped England to build the industry has now proved of disadvantage to her in retaining the Eastern markets. This change in the factors of localisation has led many to believe that the extinction of the Lancashire industry is only a question of time. Secondly, the old organization of the Lancashire industry could not stand the competition of the superior organization of the Japanese industry. The latter possesses a highly centralised organization with an up-to-date equipment. Thirdly, as said before, the postwar trend for the agricultural price to decline relatively to prices of industrial goods has in no small degree been responsible for the loss of the Eastern markets. Lastly, as regards the market in India there have been two special causes at work. One is the growing anti-British feeling born of the national movement and the second is the adoption of protectionist policy to aid the growth of Indian industries. It is not possible to say which of these causes has been the most powerful one in bringing the downfall of the industry. One can only say that their combined effect has been too powerful to be resisted by it.

Organization of the Cotton Industry

In discussing above the decline of the cotton industry in the post-war period, a reference has been made to the defective organization. Much importance has been attached to it as being one of the many causes responsible for the loss of foreign markets. A brief study of it, therefore, would be helpful in understanding the present position of the industry.

The outstanding feature of the organization of the industry is the extreme specialisation of function. Instead of all activities connected with the production of cloth from the entry of raw cotton to the finished product being concentrated in one organization, there are firms which specialise in the different stages of production. This division of the industry was not so much pronounced before 1820 as afterwards. From this year the industry showed a tendency towards extreme specialisation. First selling was separated from production, then spinning from weaving and then both from finishing. By 1885, only 50 per cent. of the workers in the industry were employed in those units which combined spinning and weaving in one place. By 1911, the percentage further declined to 30 which showed that till the Great War the tendency continued unchecked. The main reasons which seem to have been responsible for the tendency were : (1) the economies of a single process, (2) the possibility of higher efficiency in spinning by concentration over a narrower range of standardised counts, (3) the demand for a variety of cloth to satisfy the farflung markets, (4) the additional demand for yarn from the hosiery industry and the foreign markets and lastly, (5) the complicated nature of the finishing branch. The result of this specialisation was that there were, as estimated in 1924, 600 units exclusively engaged in spinning, 900 in weaving and about 230 which were engaged in spinning and weaving both. This specialisation may have been eminently suited at one time to the export trade of England but when the foreign competition arose in the outside markets requiring an adjustment of costs to the competitive level, it created insurmountable difficulties.

In addition to the functional specialisation, the industry is also noted for geographical specialisation and differences in the forms of organization in different

ent branches. The north-east section of the cotto area is devoted to the weaving side ; the south-east ; the spinning branch. While Bolton and the adjoining area have specialised in finer counts, Oldham and Rochdale have concentrated on the medium and rough counts. As far as the forms of organization are concerned a difference is noticed in the spinning and weaving branches. In spinning, the joint stock company is common ; in weaving, the private firm. This difference seems to be the result of the fact that while a small capitalist can start a weaving shed and run it profitably, he cannot do so in spinning. This latter feature of the organization has created difficulties in devising a uniform policy to meet competition.

In addition to the presence of a number of small units, there are admitted defects in equipment and marketing. While the competitors of Lancashire have 'rationalized' their industry by introducing the most up-to-date inventions, the latter has been slow in keeping step with them. The continuance of the mul spindle in Lancashire, though suited to the production of finer counts, is one example of how machinery has not been adapted to changing conditions. Japan and India mostly use the ring spindle which gives production at a lower cost. Similarly, the introduction of the automatic loom in Japan has given her an advantage in weaving costs over the ordinary looms in Lancashire. The marketing of goods is also divorced from production and, therefore, Lancashire has no touch with its consumers.

The Lancashire industry, therefore, needs to be organized if it has to survive foreign competition. This is being realised though gradually. In the last decade of the nineteenth century and the early years of the twentieth century, therefore, attempts were made to bring about combinations among the small competing units. These combinations, however, were

restricted to special branches of the industry only. Thus powerful combinations were formed in fine spinning, finishing trade and sewing thread units. In the finishing branch even price-fixing agreements were signed. Yet, before the Great War the industry remained still highly competitive.

Post-war Remedial Measures

The depression of the post-war period was more serious than, and of a different nature from, the depressions of the nineteenth century. There was a permanent and not a temporary fall in the demand for Lancashire goods. The industrialists, however, failed to realise the new forces and they adopted the traditional policy of working shorter hours to overcome the depression. Even in regard to this policy there was no agreement among all the concerned. The policy, therefore, failed because of the higher costs of production arising from the burden of overhead charges being spread over a smaller output and the weak selling by producers outside the agreement.

In 1927 another attempt was made to reduce internal competition. An agreement was signed among the spinners of higher counts. A cartel named the American Cotton Yarn Association was started for grading yarn, fixing minimum prices and regulating output. When this agreement was signed, the strong concerns remained outside it as they did not expect to profit by it. The result was the failure of this attempt also.

Thus the position of the industry continued to deteriorate and yet no agreement could be possible which would arrest the decline. The fundamental problem of the industry was the reduction of costs of production to the competitive level. This could be possible only if the industry was reorganized and the weaker, heavily indebted and out-of-date units were

removed. The lines of reorganization required were the introduction of modern inventions, bulk production, bulk marketing and proper mixture of the different staples of cotton. In 1928, therefore, a policy of combination was decided upon and the joint Committee of Cotton Trade Organizations was formed to give effect to it. Amongst the combinations which were formed subsequently was the Lancashire Cotton Corporation which was expected ultimately to control 10 million spindles and 30,000 looms. By 1930 it acquired 107 mills. Three other combines were formed in the Egyptian section of spinning. But the financial results of the new move were not very encouraging. In 1931, the position of the industry became more critical; 16 per cent. of the spindles were completely idle while the rest of the spinning mills were working to 60 per cent. of their capacity. The position in weaving was similar. It was, therefore, realised that so long as the idle machinery was not scrapped out and capital represented by it written off the financial results would not improve. The Joint Committee, therefore, proposed to scrap out 10 million spindles and 100,000 looms at a cost of £2,500,000. The scheme did not receive support. Again attempts were made at price fixing and for the removal of redundant capacity in 1933 and 1934. Being voluntary, they also did not succeed.

In this desperate position of the industry the government decided to go to its rescue in 1936. Under the Cotton Spinning Industry Act of 1936, a Spindles Board was set up to scrap out spindles. In 1937, a decision was taken to scrap out 3.2 million spindles at an estimated cost of £842,000. It seems to have succeeded in this object as by 1939 nearly 4 million spindles were scrapped out. As the Act of 1936 was lapsing in September 1939, in 1938 the government introduced more comprehensive measures, the Cotton Trade Ex-

abling Bill. It provided for the creation of a Cotton Industry Board empowered to reduce plant and maintain minimum prices. Thus since 1936, with the help of the government an attempt is being made to reorganise the industry. For the same reasons an attempt is being made by the government to find markets for the industry in the Empire countries. It is to be seen whether these attempts would put new life into this once great industry.

The Iron and Steel Industry

The iron and steel, and, coal industries are regarded as the twin hinges of modern industrialism. England is fortunate in possessing both. They have grown to their present magnitude by stages. Before the 18th century, iron was smelted in England in charcoal furnaces. In the early years of the 18th century, however, there was a timber famine and charcoal in sufficient quantities was not available. Production of iron suffered and England, therefore, imported it from Sweden, Norway, Spain and Russia.

But the difficulties of the iron industry attracted the attention of the inventive minds and attempts were made to find an alternative fuel. In 1709, Abraham Darby succeeded in producing iron by using pit coal. Iron works were also established by him at Coalbrookdale. In 1767, iron rails were produced from the pig iron made in these works. Soon after this Henry Cort in 1783-84 and Humfray in 1790 succeeded in inventing processes by which wrought iron could be produced. By these inventions the establishment of an iron industry in England was greatly helped. About the same time the inventions in the textile industry and the steam engine of James Watt were patented. The demand for iron for their manufacture coincided with the inventions in the iron industry, and thus encouraged its growth. The local-

isation and organization of the industry also underwent conspicuous changes. The industry migrated from the forests to the coal areas. Large scale units of production were established. And further all the processes from the furnace to the mill were concentrated in a single establishment. Thus a modern industry grew in place of the old domestic industry.

The industry made rapid progress in the nineteenth century. The construction of railways after 1821 and of iron vessels after 1850 created a huge market for the industry. In addition, the demand from foreign countries increased as years rolled on. The combined effect of these factors led to the astounding growth of the industry. By 1870, England was leading in iron production while Germany, France and the U. S. A. had a small output. The following figures will show this progress.

Pig Iron Production

year	1720	17,000	tons.
"	1788	68,000	"
"	1839	1,347,000	"
"	1859	3,800,000	"
"	1871	6,500,000	"

Before proceeding further it may be useful to point out the difference between pig iron, wrought iron and steel. The difference is mainly due to the difference in the carbon content in the three varieties. The presence of carbon in large percentage makes iron brittle and less malleable. The progress from iron to steel production, therefore, consisted in the reduction or elimination of this carbon percentage. Attempts were made to produce steel as far back as 1740 by one Benjamin Huntsman. He found out a process by which cast steel could be made and it was known as the crucible process. But steel production did not

make any striking progress until Henry Bessemer evolved a process in 1855-56 by which the carbon content was substantially removed. The product came to be known as Bessemer steel or acid steel. It replaced the wrought iron in the production of machinery and tools. But for the production of acid steel, iron ores which did not contain phosphorous were required. But the bulk of English ores contained phosphorous in appreciable quantities and, therefore, England had to import non-phospheric ores from Sweden and Spain. But the metallurgists were working to find out a process by which the phospheric ores could be used in the production of steel. The process was finally found by Thomas and Gilchrist. The process known after them as the Thomas-Gilchrist process revolutionised the steel industry. Not only the English ores could now be used but the German ores of Lorrain and Luxemburg could also be developed. The progress of the English steel industry before the Great War is reflected in the following figures :—

Steel Production	
1875-79 (average)	882,000 tons
1913	7,663,000 "

The prosperity enjoyed by the iron and steel industry until 1874 was threatened afterwards. The growth of the steel industry in England affected the local pig iron industry as its adaptation to steel production was difficult. And the pig iron was being replaced by steel in the production of many goods. The English industry was also exporting large quantities of iron and steel to Germany and the U. S. A. After 1870, the American industry made progress and by 1890 American steel production overtook the English output. The German steel industry also made

progress after the basic process was developed by Thomas and Gilchrist. In 1913, the American and German production of steel was four and three times respectively that of England. In the production of pig iron also these countries overtook England. In 1913 the American production was three times that of England and Germany was just a little behind her. In the U. S. A. and Germany, therefore, England was faced with new competitors. Their competitive power was also greatly increased by the ease with which their new mines could be worked.

The exports of English iron and steel therefore declined after 1880 until the end of the century. Thereafter with the revival of international trade and the general prosperity of the world, the exports increased from £29 millions in 1900 to £48 millions before the Great War. But even in this period the German and American exports were greater than those of England.

During and After the Great War

During the Great War the capacity of the English industry was expanded. The capacity of the industries in other belligerent countries also was expanded. In this period too the industry was established in those countries where previously the production was insignificant. Thus the end of the war saw a great increase in the total capacity of the world's iron and steel industry.

In the post-war period, the depression hit the English industry adversely. The demand for iron and steel was checked because of the impoverishment of Europe, the inability of many countries to lend to others on the pre-war scale and the dislocation of exchanges. Excepting the U. S. A. all other countries were affected by these factors. After 1924, however, the other countries rehabilitated their economies and

the industry was set going as before. In England, however, the industry failed to recover the ground to the pre-war level. The explanation for this condition lies in the comparatively higher cost of production of English iron and steel and a change in the nature of demand. The demand for iron declined and for basic steel in preference to acid steel increased. The consequent depression in the English industry was further aggravated by the depression of 1929-33. The exchange difficulties, the fall in the international lending and the competition of continental production affected the exports of English iron and steel. Their production, therefore, declined further to an alarming level. The following figures reflect this deterioration in the position of the industry :—

Production of Pig Iron Steel (In million tons)			Exports of Iron and Steel	
1928	7.29	9.6	1929	4.3 million tons.
1930	6.20	7.8	1931	1.9 "
1932	3.57	5.2		
1933	4.12	7.0		

The industry started recovering from 1933 onwards. This process was helped by the depreciation of sterling, the imposition of an import duty and the revival of demand from the constructional and armament industries. An attempt was also made to organize the industry as required by an understanding arrived at between the industrialists and the government when protection was given. The production of the industry improved subsequently as may be seen from the following index :—

Production of Iron and Steel, 1930 = 100

1936	150.1
1937	166.6
March 1938	168.4

After March 1938, there was a temporary recession, but with the expansion of armament production, the position of the industry again improved.

Organization of the Iron and Steel Industry

Before the Great War, there were two prominent features of the organization of the iron and steel industry. Firstly, since the establishment of the industry on the coal fields, the unit of production was fairly large and, therefore, the industry enjoyed many economies of production. Secondly, the industry was sufficiently integrated and possessed control over ores, coal, and also finishing mills. It had, therefore, an assured supply of raw materials and primary markets; it could also economise on fuel and selling organization. This tendency towards integration received an impetus during and after the war. As a result in 1928, the pig iron producers controlled 72 p.c. of ore, 62 p.c. of coal, and 54 p.c. of coke requirements. In the same year 20 firms controlled 70 p.c. of the total output of iron and steel. Though in England control over the industry is sufficiently concentrated, in Germany and the U. S. A. the degree of concentration is still higher. Thus five German organizations controlled 70 p.c. of the output and in the U. S. A., the U. S. Steel Corporation and the Bethlehem Steel Corporation controlled between them 55 p.c. of the total capacity.

The industry, however, is not free from drawbacks which require to be removed to increase its competitive power. Though the unit of production is large, compared to other countries, it is still small. In 1929, it was found that while the capacity of a typical English blast furnace was 48,000 tons, that of the American and German ones was 138,000 tons and 97,000 tons respectively. Further, it was pointed out by the Balfour Committee that the equipment was

not sufficiently modern and that the continuous process of production was not sufficiently developed in England.

• Post-War Remedial Measures

There are two features of the industry which make it highly necessary for some measure of agreement among the producers. Firstly, it must work upto a certain capacity before the economies of production could be derived. Secondly, over short periods, the demand for its output is likely to fluctuate with fluctuations in investment. The production however cannot be easily adjusted to demand because if it is done the cost of production may rise and bring about a further fall in demand.

• Before the last war, the usual method of providing against these drawbacks was to enter into price agreements among producers. But these agreements were not completely successful. In the post-war period, when the depression affected the industry and when the International Steel Cartel was formed in 1927 between Germany, France, Belgium and Luxemburg the producers were brought together by the fear of competition. In 1927 an organization was set up to fix minimum prices in the home market, to give rebates and to delimit the areas of competition. The organization was superseded in 1930 by a more permanent organization, the British Steel Export Association. Measures for the rationalization also were undertaken by setting up the Iron and Steel Research Council. The finance necessary for rationalization was provided by the Bankers Industrial Development Company and the Securities Management Trust, a subsidiary of the Bank of England.

The depression of 1929 followed on the heels of the reorganization schemes of 1927. The foreign competition became very keen not only in foreign markets

but also in England. In April, 1932, the English government, therefore departed from its traditional policy of free trade and gave protection to the iron and steel industry. The industry, however, was required by the tacit understanding arrived at between the producers and the government to proceed with the schemes of rationalization. In pursuance of this agreement, the National Committee of Iron and Steel Industry was set up to devise measures for rationalization. But unfortunately the success so far achieved in this direction has been negligible. After having secured the home market by the imposition of import duties, the producers made an attempt to secure a quota in the international markets. In July, 1936 an agreement was signed between the British Iron and Steel Federation and the Continental Steel Cartel which was to hold good until 8th August, 1940. Britain was given a quota in the international markets on the basis of her export trade in 1934. Thus by the steps taken in 1932 and 1936, the position of the industry improved considerably. The rearmament programme of recent years also helped the revival of the industry.

The Coal Industry

It has been rightly remarked that the Industrial Revolution hinged on coal and iron. The part which coal has played in it could be measured from its vital importance in the metallurgical and other manufacturing industries and the various means of transport. Coal supplied to these industries motive power which was cheap and available throughout the year irrespective of the seasons.

In the 16th century, pit-coal was used to some extent for domestic and non-power industrial purposes. The demand for power purposes was very limited as the industries were mostly domestic and

used manual power. Where necessary natural power was used. The production of coal was small and was hindered by the difficulty of working deeper seams as there was no device of draining water from the depths of pits. The estimated production in 1660 was hardly 2,225,000 tons. However, the difficulty of pumping water was overcome by the invention of Savery's 'fire engine' and Newcomen's engine in the last decade of the 17th century. Yet the production of coal did not show any remarkable increase. By 1750, it was estimated at only 5,000,000 tons.

The conditions for the development of the industry became favourable after the middle of the 17th century. The Derbies had found a process by which coal could be turned into coke and used in the smelting of iron. The steam engine invented by Watt had also finally solved the problem of draining water from the pits. The construction of canals after 1760 had provided a quicker and cheaper means of transport. In addition, the growing use of the steam engine in the factory industry speeded up the demand for coal. After 1860, the demand for coal from foreign countries where industries had appeared gave a further fillip to the growth of the industry. The consequent remarkable progress of the industry is shown by the following figures :

Production		Export	Per cent. of output	
(In million tons)		(In million tons)		
1800	10	1866-70 (average)	10	..
1860	80	1900	50	24
1900	225	1913	98	33
• 1913	287			

Employment

1850	200,000 workers
1913	1,127,000 "

In the nineteenth century, the growth of the industry was astoundingly rapid, but this very growth developed a certain amount of instability in it. With the growing demand, less and less fertile mines began to be worked. The cost of production also increased in proportion to the difficulty of raising coal. The prices which were determined by the cost of production of the marginal firm increased substantially. In these circumstances the prosperity of the industry would continue if the demand for coal was not affected by the rising prices. If, however, it was likely to be affected, the industry would have been required to lower wages and accept lower profits to maintain demand. Reduction of wages was, however, likely to be resisted by workers with adverse effects on the industry. This problem was further complicated by the reduction of production per worker after the hours of work were reduced under the Coal Mines Regulation Act of 1908. Moreover a long period of prosperity had given rise to a structure in which the chances of any improvement in the organization or technique were very remote. Thus though the industry was prosperous in the nineteenth century, the development of factors mentioned above indicated that the future would not be as bright as the past.

During and After the Great War

During the war the industry was placed under government control. Its output was affected by the shortage of labour. The export trade in coal was also restricted because of the priority of supply to the home industries and the shortage of shipping.

At the end of the war there was a temporary boom in the industry. The prospects of the industry, however, appeared to be gloomy after 1920, but their full realisation was postponed until 1927 because for some time the appearance of prosperity was maintained by the temporary outside demand which arose from the

strike in the coal fields in the U. S. A. in 1922 and the occupation of the Ruhr by France in 1923. Thereafter the subsidy given by the government between August 1925 and May 1926 helped the industry to tide over difficulties for some time. It was in 1927 that the coal industry realised for the first time that its difficulties in the post-war period were due to changes in the forces governing the industry.

In the post-war period, the conditions affecting the prospects of the industry had changed fundamentally. The demand for coal was increasing at a slower rate as researches made in the war period had helped to find out methods of economising coal and as alternative sources of power like oil and electricity began to be used on a larger scale. In spite of this state of demand the capacity of the industry in the world as a whole was increased considerably. Between 1913 and 1928, the production in Holland, Spain, India and Japan increased substantially. The world supply, therefore, increased faster than the capacity of the markets to buy it. In addition, some of the countries which had started the industry only recently introduced measures to encourage it. They protected the home market for home production, offered subsidies on exports, gave reduced railway rates and technical help and permitted longer hours of work. The combined effect of these factors was very adverse to the English industry. The following figures will show the position of the industry in the post-war period :—

	Output (In million tons)	Export (In million tons)	Employment (In thousands)
• 1901-13 average	270	88	—
1913	287	98	1,127
1924	267	85	1,230
1930	244	75	943
1933	208	57	797

Though the position of the industry improved after 1933, it could not be regarded on the whole as satisfactory. On the basis of production in 1934, the relative index of production in 1937 was 93 and the exports were estimated at 40 million tons. The unemployment figure also was very high. The desperate position of the industry and lack of agreement among the interests concerned, therefore, called for intervention by the government.

Organization of the Coal Industry

When the post-war depression affected the industry, the defects in its organization became prominent and were in no small measure responsible for the continued depressed state of the industry. Firstly, the prominent feature of the organization of the industry is that the coal deposits in England, unlike those of the continental countries and of America, are geographically scattered. This has given rise to differences in the organization of the industry in different centres. The Royal Commission on the Coal Industry (1925) found extreme diversity in the structure of coal mines from the point of scope and cost of production ; they differed widely in regard to their size, age, organization and prosperity. Secondly, the control over the industry is loose. There is a predominance of the small enterprise. In 1924, 2,481 pitheads belonged to 1,400 separate undertakings. The bulk of production, of course, is in the hands of a small number of large firms. Thus 98 per cent. of production is controlled by 715 firms. On the contrary, in Germany 70 companies control 175 collieries producing 152 million tons of coal. Thirdly, the management in the English industry is still old-fashioned. Very little progress has been made towards proper planning of output. As an instance of this defect it may be pointed out that, unlike Germany and America, mechanical cutting of coal has made

little progress in England. In 1913, while 8 per cent. of the total output in England was mechanically cut, in Germany the same percentage was only 2 ; but in 1928, the percentage rose to 85 in Germany, while in England as late as 1933 the percentage was still 42. In the United States of America, the relative percentage in 1929 was 75. Fourthly, while it is admitted that the prosperity of coal industry depends on a close co-operation between mines, coke-ovens, blast-furnaces, steel works, electricity generating stations and chemical works, the early start of the English industry has made such a co-ordination difficult. The continental countries, however, have achieved this thereby reducing loss of production and are in position to undersell the English coal. Unlike England, other countries have also made full use of the by-products. Fifthly, as the demand for coal mainly came from the constructional industry and foreign markets, it has been fluctuating from period to period requiring adjustment by common agreement in regard to wages and prices. But this agreement has been made difficult by the loose organization of the industry. It has reacted adversely on the industry.

Remedial Measures in the Post War Period

Before the last Great War, the measures which were adopted to remedy the instability in the industry from time to time were price fixing agreements, payment of wages on sliding scale basis and forward contracting. But none of these methods could be said to have succeeded completely.

In the post-war period when the depression became acute, a comprehensive scheme known as the "five counties scheme" was adopted in April, 1928. The Central Collieries Commercial Association was formed among the coal-owners in Yorkshire, Derbyshire, Nottinghamshire, Lancashire, Leicestershire,

Staffordshire and Warwickshire. According to the agreement a basic quota of production was fixed for each member and the monthly production was to be adjusted by a reference to it. A levy of 3d. per ton on all the coal raised was to be realised and the amount so collected was to be utilised in paying a subsidy of 2sh. per ton on the coal exported from the area. Similar schemes were put into operation in South-Wales and Scotland.

But as the above schemes did not improve the position of the industry appreciably, the government had to intervene in it by enacting the Coal Mines Act of 1930. The Act provided for the regulation of production and sale of coal and also for the reorganization of the industry by promoting amalgamations. A Coal Mines Reorganization Committee was established and it was entrusted with the work of reorganizing the industry. In the beginning, it tried voluntary schemes, but it failed to secure a substantial measure of agreement. In 1932, therefore, it applied compulsion and yet its achievement was inconspicuous because of legal difficulties. The commission, therefore, recommended that no progress could be made in the reorganization of the industry unless the royalties were nationalised.

The working of the Coal Mines Act of 1930, therefore, was frustrated on the legal ground. The position of the industry, however, became more desperate as the depression became more acute. The Government therefore had to consider steps to overcome the difficulties met with by the Coal Mines Reorganization Committee. In the meanwhile, an agreement was signed between England and Poland on the question of export markets and prices in 1934. In 1936, the owners again introduced selling schemes. But these schemes were just palliatives : they could not revive the industry. The Government, therefore, introduced

Coal Bill in November, 1937, the main provisions of which were : (1) purchase of all coal royalties by the State, (2) compulsory amalgamation, and (3) quota system and area selling schemes as provided in the Act of 1930. The bill sought to remove opposition to the reorganization of the industry by buying over the royalties and by providing for compulsory amalgamation. The bill had a very stormy reception in both the Houses of the Parliament. It was amended there in such a manner that it lost its original force. However, the Coal Bill is indicative of a change in the attitude of the Government towards industrial problems. The reorganization of the coal industry under government aegis might help it to revive its competitive position lost in the post-war period.

Chapter VI

FROM FREE TRADE TO PROTECTION— A SURVEY OF ECONOMIC POLICY

The title of this chapter—From Free Trade to Protection—sums up the history of English trade policy in the last hundred years. Occasional reference has been made to free trade as well as protection in the foregoing chapters. The purpose of the following pages is to study them in details and show how they formed a part of the general economic policy of the country. In England for hundreds of years the economic activities of the people were regulated on a local basis, may be because of the peculiar organization of the country, but towards the end of the Middle Ages, as mentioned before, with the growth of national consciousness and of opportunities for trade, regulation on a national basis took the place of loose local control. The new ideas which were expressed through a number of statutes, orders and decrees

passed to control wages, industrial production, navigation and trade came to be known as Mercantilism. They led to the centralisation of authority and subordination of the individual to the state for a fairly long time; but on the whole the policy did not work very successfully either in the economic sphere or in any other and the belief in the efficacy of such a policy began to decline in the eighteenth century. There started as a matter of fact an active opposition to it in England as also in France.

The circumstances which turned the tide of state regulation are interesting. In the eighteenth and the early nineteenth centuries, the people after their experience of Mercantilism had become distrustful of governments. Gradually they came to believe that human nature left to itself would do more good to nations than vexatious interference by governments. They pleaded that man should be left free in his social and economic activities. If this was done, he would follow, guided by reason and instinct, a course which would lead him and the nation to prosperity. This was the substance of the teachings of Jean-Jacques Rousseau (1712-78) and Jeremy Bentham (1748-1832). In the economic field, the case for freedom of activity was put forward very forcefully by Adam Smith in his book the *Wealth of Nations* published in 1776. The lead given by these writers was supported by the writings of later economists like Ricardo, McCullouch, Senior and James Mill. Their attacks were too strong to be resisted by the Mercantilists and at last liberalism prevailed upon them. The new philosophy which came to be styled *as laissez-faire*—let things alone—directed that the role of the state should not extend beyond the defence of the country from external attack and internal disorder. The individual should be allowed to enjoy the maxi-

imum of freedom consistent with these responsibilities of the state.

When the Industrial Revolution occurred in England, the influence of the laissez-faire doctrine was already noticeable on the outlook of the state towards the changes in the country. As the new factories were established, the government did not interfere either in the matter of location or form of organization or the conditions of work. Shortly afterwards the existence of 'factory evils' was brought to its notice but the government did not like to interfere with the new industries because of its feeling that interference might react adversely on their competitive power. As a matter of fact, the old regulations in regard to wages and conditions of work in industries were allowed to fall into disuse and were finally repealed in 1813-14. Even in regard to houses that were constructed at this time in the growing industrial cities the attitude of the government was fundamentally the same. Private enterprise was given free hand and no restrictions on construction regarding sanitation or design were prescribed by the government. The result was appalling. The government cannot escape responsibility for the rise of industrial slums in many of the towns of the nineteenth century.

In transport like industry the attitude of the government was similar. Roads, canals and railways all were built by private enterprise without any plan as to their future growth. In many cases it led to duplication of services and hardships for passengers and traders. It involved even waste of capital on a considerable scale.

*In the field of trade, the influence of the laissez-faire policy made itself felt much more slowly. England was at war with France from 1793 to 1815 excepting for a brief period. During these years the population was growing as also agricultural produc-

tion under enclosures. Prices of corn were high and rents good. The export of corn nearly stopped under the conditions of war. England's trade with Europe in manufactures was cut off by the Berlin ~~decrees~~ of Napoleon though on occasions some imports of English goods were made under licenses issued under the decrees. England retaliated by issuing the Orders in Council to completely blockade Europe. The resulting loss in trade was partly made good by finding new markets in the colonies and the newly established republics of South America. England came out victorious from this war but was burdened with a heavy national debt amounting to £860 millions. The taxation of the people also had increased from the pre-war level of £17 millions to £72 millions. The existing custom duties were increased and many new ones were introduced. Incomes also were taxed. The navigation laws and colonial restrictions continued with unabated force.

Soon after the end of the war the country was thrown into a depression. Though it had become richer in the previous decades, the mass of people lived in miserable conditions. In particular the conditions of the industrial workers were pitiable. Wages were falling and grain was dearer. The workers had looked forward to cheaper grain after the war was over and imports were freely permitted. This hope was not realised. The agricultural interests fearing imports on a larger scale leading to a fall in prices and rents set up an opposition to unrestricted imports and demanded protection from the ~~Parliament~~. It yielded to their pressure to the great dismay of the working classes. On top of this the government abolished income-tax but continued many of the custom duties which weighed very heavily on the poorer classes.

The Corn Law duties, as remarked previously,

were imposed in 1815 and continued to be in force until 1846. They aroused a good deal of controversy. It was remarked that the welfare of the masses was sold to the agricultural interests. The principle underlying these duties that corn should not be imported into the country until its price had reached a certain level was not new. By a previous Act of 1773, the imports of corn were restricted until its price had reached the level of 48s. per quarter. A similar Act of 1791, raised the level of minimum price to 54s. When the Corn Law duties were imposed in 1815 the ruling price of wheat was 6ls. to a quarter and yet imports were not permitted until the price had reached 80s. It clearly showed that the measure was prompted by class interest. The avowed objects of the framers of this measure were to stabilise the price of grain and to encourage the extension of agriculture at home. In both these objects, as the subsequent years showed, they did not succeed. On the other hand the masses in the country suffered from a shortage of food. The Act also adversely affected the opportunities of England to sell manufactured goods to other countries in exchange for their grain.

After some years the depression began to lift. Attempts to restore normal currency were followed by accumulation of capital and its investment in industrial concerns. The number of industrial workers increased but as wages were low, prices of corn high and working conditions bad, signs of smouldering discontent were noticed here and there. But the influence of laissez-faire ideas was so great that the general feeling among the people was that nothing could be done to improve their lot. Moreover the wage fund theorists had warned that any attempts to increase the wages of one section of people would react adversely on the remaining sections. Many persons also had argued, following the line of Malthus'

thinking that if the conditions were improved it would lead to an increase in population. The increased numbers will lead to a keener competition for employment and bring down wages as the wage fund would be shared among a larger number. The result of these ideas was inaction on the part of authorities. The conditions of workers grew from bad to worse. An attempt was made to explain that the miseries of workers were not so much the result of laissez-faire policy which was fundamentally sound as of its incomplete enforcement.

In the succeeding years, therefore, the laissez-faire policy was applied in all directions. Inspired by it the government repealed the combination laws in 1824-25, lifted the ban on export of machinery and emigration of artisans in 1825 and abolished the system of allowances in 1834. The movement for the liberalisation of trade also gathered speed and was specifically directed towards the repeal of Navigation Laws, revision of general tariff and the abolition of Corn Law duties. These lofty ideals were not achieved all at once. Guided by William Huskisson, the President of the Board of Trade and Robinson, the Chancellor of Exchequer, the Parliament passed in 1823 the Reciprocity of Duties Bill. It authorised the government to enter into agreements with foreign countries for the purpose of relaxing the restrictions contained in the Navigation Laws in return for the withdrawal of similar restrictions against English merchants. Consequently treaties were negotiated with Denmark and Netherlands in 1824, with Hansa towns in 1825, with France in 1826 and with Austria in 1829. The coasting trade and the trade between the mother country and the colonies, however, was not thrown open to foreign countries. By these treaties, however, Navigation Laws lost much of

their force. They were finally repealed between 1849 and 1854.

After achieving success in the relaxation of the Navigation Laws, Huskisson and his colleagues set themselves to the task of revising the fiscal policy of England. For centuries England's foreign trade was subjected to a number of import and export restrictions. Though previously attempts were made by Walpole and Pitt to revise customs duties, their efforts did not meet with great success. By the Customs Consolidation Act, Huskisson reorganized the whole system. The customs laws were simplified and made intelligible to the average man. Duties on import of raw materials used in English manufactured goods were reduced. As no serious competition was feared from foreign manufactures duties on them also were levelled down. Restrictions on export were abolished. It was expected that these changes would lead to increased consumption and general prosperity. However, these changes were followed by a crisis in December 1825 and no wonder it was attributed to the reforms of Huskisson. Hence there was no further attempt at revision until 1842.

In the meanwhile agitation for the repeal of the Corn Laws started. In 1839 an Anti-Corn-Law League was formed in Manchester. Its activities were helped a great deal by two leaders in politics, Richard Cobden and John Bright. A paper named "Anti-Corn-Law Circular" was founded and through its columns the League endeavoured to educate public opinion in the country. It also made use of the platform to preach its objects. The battle was joined in 1841 and was won under strange circumstances. In that year Sir Robert Peel formed a conservative government by defeating Lord Melbourne. As the leader of the conservative party he was pledged to follow the protectionist policy. The government was in financial

difficulties. But the failure of Baring, the Chancellor of Exchequer in the previous ministry, to raise duties in 1840 clearly showed to him that these difficulties could not be solved by following the way of Baring. He was convinced that the interests of the country required a general revision of tariff and a re-introduction of income-tax. In 1842 he decided to act. The income-tax was reintroduced and prohibitions on trade were abolished. Customs duties on a number of articles were also reduced. No fewer than 730 out of 1200 dutiable articles were affected by his action. The consequent reduction in revenue amounted to £34 millions, but was made up by income-tax. The policy thus initiated was carried forward in 1844 and 1845 and duties on nearly 430 articles, mostly raw materials, were abolished. Thus a leader of the conservative party left its creed and showed himself up as a free-trader.

The Corn Law duties, however, were left untouched. But the League continued its attack on them and was substantially helped in its efforts by the adverse effects of the economic conditions in the country. In 1844 and 1845, there were bad harvests. Ireland was faced with a famine. Peel, therefore, summoned up courage to encounter the wrath of the agricultural interests and in 1846 introduced a measure which proposed to abolish the corn duties from 1849 and reduce many others, mostly on food articles, raw materials and manufactures. The measure was passed by both the Houses but was followed by a storm against Peel. By a regrouping of the parties Peel was forced out of office. But he had achieved a great thing. The removal of the Corn Law duties had sounded the death-knell of protectionism in England. The work which was thus initiated by Peel was carried to its completion by Gladstone in later years. In 1852 when he became the Chancellor of Exchequer,

duties on 123 articles were abolished and on as many as 133 commodities reduced. But still there were many duties awaiting his attention. The opportunity came in 1860 when he became a member of Lord Palmerston's ministry. In this year the number of dutiable articles was reduced from 419 to 48. In the subsequent years the policy of Gladstone was faithfully followed by succeeding ministries and the number of dutiable articles was reduced to 20 in 1877 at which figure it stood until the outbreak of the Great War. Thus after years of hard fighting England had become a free trade country. It should, however, be noted that the country adopted the free trade policy not on theoretical grounds but because of the forces working underneath the economy of the country. English industries and population both stood to gain by it.

While the free-traders were thus scoring success, in the social field attempts were being made to put a check to the laissez-faire attitude of the government. They met with a considerable success and the credit for it goes to the Humanitarian party led by Lord Ashley (later on Earl of Shaftesbury). They succeeded in forcing on the attention of the government the need for raising the social standard of the working classes and the possibility of achieving it without affecting adversely the prosperity of the country. The efforts of the party were crowned with success and after 1830 a number of factory Acts, discussed in the following chapter, were passed by which the working conditions in the factories were regulated. A Central Board of Health also was started in 1848 with powers to take steps necessary for improving the sanitary conditions in the inhabited localities of the country. The work of extending and improving education hitherto treated with indifference was taken up in hand and grants were given to institutions

imparting it and inspectors were appointed to report on the progress of such institutions. These steps of the government definitely foreboded a change in its laissez-faire attitude.

The foregoing changes were followed by a period of prosperity in England between 1850 and 1875. The free-traders believed that their claims in favour of free trade were completely vindicated by the progress of the country. But very soon this complacency was shaken. In 1860 when a trade treaty was signed between England and France in which the former gave concessions to the latter, Cobden had predicted that a world free trade would follow in a few years' time. This hope was disproved by subsequent events. After early inclinations towards free trade, Germany and France adopted a protectionist policy. The U.S.A. which was already a protectionist country carried the policy to absurd limits. To their ranks were added other European countries of some importance. England alone of all the industrial countries remained on free trade. The disillusionment attending the realisation of the true picture was heightened by a depression which visited the country after 1875. Agriculture and industry both suffered from the competition of newly developed countries. Many persons, therefore, felt that it was a folly to cling to free trade policy when the governments of other countries were actively helping their industries and trade by protection and other devices. The volume of opinion against free trade began to increase but for many years it was not sufficiently large to make its weight felt.

In the following years, however, the government took certain steps calculated to protect the interests of English trade. By the Merchandise Marks Act of 1887 imitation of trade marks was made illegal and the declaration of the country of origin of the imported

goods was made compulsory. Under the Patents Act of 1907 a provision was made that patents taken out by foreigners in Great Britain would lapse unless its manufacturing was started in the country within four years. Further to supply information to merchants on the possibilities of developing foreign trade, a Commercial Intelligence Department was started in 1900. Later in 1917 it was replaced by the Department of Overseas Trade with wider powers and scope of work.

In keeping with this change in attitude towards trade, in the last half a century England's outlook towards her colonies, also has undergone a vital change. In the nineteenth century at the height of laissez-faire influence Gladstone and others had regarded the colonies as an unprofitable burden and responsibility. Many of them, at least the important ones, were, therefore, given the self-governing rights. Before 1875 Canada, New Zealand, the colonies of Australia (except West Australia), New Foundland and the Cape Colony were given responsible government. But in the last quarter of the nineteenth century, the development of sea-transport and the construction of railways in the colonies showed immense possibilities of using them as sources of raw materials to, and as markets for, the English industries. The idea of uniting the self-governing dominions and the mother country into an Imperial Federation, therefore, began to dawn in the minds of many politicians though no definite shape was given to it immediately. The early indication of this change in the attitude was the first colonial conference of the prime ministers of important colonies held in London at the time of the Golden Jubilee of Queen Victoria in 1887. A second conference was held at the time of the Diamond Jubilee. Thereafter these conferences became regular and were styled as Imperial Confer-

ences. Important colonial problems were discussed at the conferences. Further steps were taken to encourage trade between the colonies on the one hand and the mother country on the other by extending communication facilities and trade intelligence service. By the Colonial Stocks Act of 1900, the securities of the colonial governments were included in the list of trustee securities and thus the financial market of London was opened to them. The governments also encouraged the formation of trading companies under charters from the Crown to venture into the undeveloped regions. Among such companies which were formed at this time, the important ones were the British North Borneo Company (1881), the Royal Niger Company (1886), the British East Africa Company (1888), and the British South Africa Company (1889). These companies came in possession of territories which later on were taken over by the Crown.

As said before, after 1875 the opposition to free trade policy increased and demand for protection in the interests of English agriculture and industry was made. The movement took a new turn when Joseph Chamberlain, who became the colonial secretary in 1885, started a campaign for Imperial preference. His idea that a tariff wall should be raised against non-British countries and that a preference in custom duties should be given to colonies was widely shared. Some of the colonies which had introduced protective tariff had already given preferential treatment to British goods. The way was led by Canada in 1897 and was followed by other dominions. But Britain could not reciprocate so long as she was on free trade. In 1903, therefore, a Tariff Reform League was started. In 1904 Chamberlain resigned from the ministry to carry on the work for the realisation of his idea. In 1904 an Unofficial Tariff Enquiry was set up by the

League. Its recommendations were in conformity with Chamberlain's views. However, in the general election of 1906, the liberals succeeded and the chances of any tariff reform became remote. But Chamberlain did not give up his work until his death in 1914.

The first break in the free trade policy was made, for reasons other than economic, by the McKenna duties introduced in 1915 on the import of luxury goods like motor-cars, motor cycles, cinema films, clocks and watches, musical instruments and gramophones. This was primarily done to save shipping space and protect exchange. These duties were continued even after the war was over and in 1919 the colonies were given a preference of one-third on the goods imported from them. It is no wonder that the duties were interpreted to be protective in their effect. In addition by the Act of 1920 heavy duties were imposed to protect the infant dyestuff industry. The principle thus adopted was further extended to the protection of the 'key' industries by the Safeguarding of Industries Act of 1921. Duties on some 6000 articles were imposed. By the same Act dumping of foreign goods was prevented. When the conservatives appealed to the electorate on the issue of a full-fledged protection, they lost office in 1923. The Labour government which was in office for some time thereafter repealed the McKenna duties in 1924. In the same year the conservatives gave up their idea of introducing protection immediately and returned to office. They restored the McKenna duties and extended the scope of the Safeguarding Act to include silk, artificial silk, cutlery, lace and embroidery. It was also provided that protection might be extended to those industries which were threatened with unfair competition from outside. The conservatives remained in office until 1929 when the labour party again

succeeded them. It, however, could not succeed in removing the protectionist features of the previous tariff changes immediately and before it could do anything substantial, the country was faced with a crisis of unprecedented magnitude.* In the general election of October, 1931, a highly protectionist government was returned to power. Soon after it assumed power the trade policy of England underwent a fundamental change. In 1931 the Abnormal Importations (Customs Duties) Act and in 1932 the Horticultural Products (Emergency Customs Duties) Act were passed as temporary measures. Both the Acts provided that import duties may be levied on certain goods up to 100 per cent. The first Act was to last for six months only and the second one for a period of twelve months. These temporary measures, were replaced by the Import Duties Act of 1932 which came into force from March 1, 1932. With the exception of a small number of goods, all foreign goods were subjected to a duty of 10 per cent. A Tariff Advisory Committee on the advice of which further additional duties could be levied on certain goods when necessary was appointed. Advantage was taken of this provision and duties on many goods were raised. In April 1932, the Advisory Committee was empowered to remove any article from the free to the protected list. Subsequently many tariff changes were made as the needs of trade demanded. England also used the tariff for the purpose of bargaining with other countries. Imperial preference was given a concrete shape in the Ottawa Agreement of 1932. Agreements with foreign countries also were signed. Thus since 1931, England entered the ranks of protectionist countries. The new policy, however, has been subjected to searching criticism in the last decade and no one can foretell as to what further changes it will undergo in future.

The influence of the laissez faire doctrine on the

activities of the state in the social field has also declined in the last half a century. In fact it is being regarded that the state has a duty to perform towards the labouring classes. Hence in 1893 the hours of work in the sweated industries were regulated. Similarly social insurance against sickness and unemployment was introduced in 1911. An attempt has also been made to preserve industrial peace by conciliation and arbitration. After 1870, the government devoted a great deal of attention to education and by a number of Acts a national system of education was established. It is not possible to go into the details of all these changes. But a few changes mentioned above are sufficiently indicative of the transformation in recent times in the outlook of the state to economic phenomena.

Chapter VII

THE TRADE UNION MOVEMENT & LABOUR LEGISLATION

Trade union movement in its modern form is the direct result of the inequality of status between men and men which was introduced by the rise of the capitalistic enterprise. When the Industrial Revolution occurred and workers migrated from the countryside to towns in search of occupation, they had nothing to sell but the skill of their hands. The agricultural revolution had also deprived them of their other means of livelihood. They were confronted with a different type of employer. But the classical economists of this period preached that there was no need to fetter the hands of employers in their bargain with labourers because if the terms offered by them were not good, they would not be able to secure necessary labour. They believed that the free play of

the laws of demand and supply would secure to labourers what may be called as "just" terms. They, however, failed to see that labour was a perishable commodity, and the day on which a labourer had failed to secure employment, he had wasted a day's labour for ever. This weakness of a labourer introduced an element of inequality in his bargain with the employer. The labourer, therefore, realised that the remedy to remove this inequality to some extent lay in the union of those whose interests were identical. Thus trade unionism was born out of this necessity.

Before the Industrial Revolution

Though trade unionism in its modern form did not exist before the coming of the machine age, the most familiar type of organization among the workers engaged in a certain trade was the craft gild. It was controlled by the masters in a trade and was entrusted with the duty of safeguarding the interests of those engaged in it. The relations between the master-employers and the journeymen and apprentices were cordial and an apprentice had always a chance of rising to the position of a master. The conditions of work also were not such that the worker would like to contrive against his master. There was, therefore, generally no urge amongst the employed to organize against the employers.

With the break-up of gilds in the sixteenth century, the differences between workers and employers began to increase and the former started associations amongst themselves on the lines of trade clubs. Such associations were formed among hat-makers, tailors and shoe makers. The attitude of the state towards them, however, was unsympathetic and it tried to assert its power of regulating industry. It passed laws fixing maximum wages and forbidding combination among workers in certain trades. By the statute of 1563, the Justices of Peace were given power to enforce

the maximum wages and by the laws of 1720 and 1725 combination of tailors, and, weavers, combers and knitters was forbidden. To add to the miseries of workers, export of machinery and emigration of workers was prohibited by the laws passed after 1700. This led Adam Smith to remark later on that "whenever the legislature attempts to regulate the differences between masters and their workmen, its counsellors are always the masters". It is no wonder that in such conditions regular trade unionism did not grow.

Since the Industrial Revolution

With the coming of the machine age, the urge for combination took new roots. The growth of factories brought together an army of workers sharing the same conditions of life and work. They had left behind the healthy village conditions and had come to work in factories where the hours of work were long and wages poor. They had no voice in the management of industry in which they worked. In the cities the home life also was full of miseries. Under the influence of the teachings of Adam Smith and the laissez-faire school, the government gradually abandoned even the enforcement of the statutes through which it regulated industries and finally repealed them in 1813 and 1814. Thus an atmosphere of hopelessness confronted workers. They had, however, now better opportunities of discussing among themselves their sufferings. From these early discussions they came to the conclusion that through influence arising from organization they could achieve many rights which law may give them only slowly.

The need for combination was keenly felt about 1790 when the new factories had come to be established and were proving successful. The French Revolution with its slogan of liberty, equality and

fraternity had kindled a new hope in the hearts of workers. Some trade unions were formed by workers, but when the war broke out between England and France in 1793, the government alarmed by the possibility of an echo of the French Revolution in England, decided to suppress the liberty of people including the right of workers to combine. Laws were passed in quick succession. In 1794, the Habeas Corpus Act was suspended; in 1796 an Act was passed against treasonable practices and seditious meetings; in 1797, and 1800 laws were passed forbidding combination among workers for the purposes of raising wages, reducing hours of work, intimidating employers or striking to enforce their demands. The Acts also prohibited unions among employers but this part of the law was seldom enforced.

When these Acts were passed trade unionism became illegal but combination among workers was not altogether rooted out. It took the form of secret organization. Some workers organized themselves into friendly societies which were given a legal status by an Act of 1793. One of the secret organizations whose members were known as Luddites became famous by its activities against the introduction of machinery. Thus though some combinations were formed, the general body of workers at this time was so ill-educated and unintelligent that no demand was made by them for the repeal of the Combination Acts.

In 1815, when the Napoleonic wars came to an end, the conditions of life and work of the workers deteriorated still further because of the effects of a depression. Unemployment increased and wages fell. At such a time the workers' cause was championed by one Francis Place, a master-tailor of Charing Cross. In his activities for the repeal of the Combination Acts he secured a valuable friend in Joseph Hume who was the leader of the radical party in the Parliament.

After a good deal of agitation, the Parliament appointed a committee under the chairmanship of Joseph Hume to report on the state of the Combination Laws. He succeeded in manoeuvring the committee to recommend to the Parliament the repeal of the Combination Acts. The Parliament passed an Act in 1824 by which societies of workers were permitted and strikes were legalised. The workers used their hard won liberty fully in 1824 and there were a number of strikes. The Parliament was alarmed by this and immediately appointed another committee to report on the issue. Not being as sympathetic as the previous committee, it recommended in favour of restricting the privileges of workers. As a result of the report, the old Act was repealed and a new Act was enacted in 1825 which conferred on workers the rights of combination and strike but restricted their use by limiting their scope. The Act provided that workers may meet to discuss rates of wages and hours of work, but any agreement arrived at at this discussion must relate to those workers who were present at the meeting. It forbade the use of force, intimidation, threats, and attempts to coerce the non-unionists to join a strike or an association. The provisions were so wide that effective unionism was rendered very difficult. The legality of trade unions also still remained incomplete because of the presence of a body of common law which provided many loopholes for the employers to prosecute workers. For over half a century, therefore, the workers had to fight to secure complete legalisation of trade unions. The need for improvement in law was clearly shown by the prosecutions brought against labourers soon after the Act of 1825 was passed. In 1832, a group of Lancashire miners was prosecuted under the common law for writing to their employers declaring their intention to strike. In 1834, some pottery workers were imprisoned for visiting their employers as

ernment was influenced by the Minority report and the subsequent enactments gave effect to some of its provisions. By the Trade Union (Protection of Funds) Act, 1869 protection was given to the funds of trade unions. In 1871, by passing the Trade Union Act, the government gave a new status to trade unions. They were not to be regarded as unlawful merely because they were in restraint of trade. They were also permitted to be registered as friendly societies if they so desired. A trade union which was registered could own lands or buildings and could bring or defend an action at law. But the liberties thus conferred on them were rendered ineffective by the enactment of the Criminal Law Amendment Act passed at the same time which made "obstructing, threatening, persistently following, watching or besetting any workman who had not voluntarily joined the trade union illegal". This made the use of strike as a weapon very difficult. The 'Junta' carried on agitation for the reform of the law which finally succeeded in 1875. By the Conspiracy and Protection of Property Act of 1875, it was provided that no action committed by a group of workmen was punishable unless the same act was criminal if committed by a single individual. This had the effect of permitting peaceful picketing. The Trade Union Act of 1876 amended the Act of 1871 to the effect that the certificate of registration of a trade union was not to be cancelled unless the trade union had failed to furnish the required returns under the law, or had ceased to exist, or had itself requested for the cancellation of the certificate. Thus by the Acts of 1825, 1859, 1869, 1871, 1875 and 1876 all traces of illegality of trade unions were removed and they were given a respectable position in the eyes of law.

Among other interesting developments of this period mention must be made of the inauguration of the Trade Union Congress in 1868 and the attempt at

the use of arbitration in disputes. The Manchester Trade Council issued in 1868 a general circular summoning a general conference of trade unions to discuss the problems that were going to come shortly before the Parliament. It was to be the first of the annual series of such conferences. The conference of 1871 was fully representative of the trade unions in the country. Since then it has become an influential body in the labour world. As regards arbitration, though many attempts were made to use it in labour disputes in the thirties and forties, the first successful attempt at establishing a regular machinery for arbitration was made by Mr. Mundella who set up a Board of Arbitration and Conciliation in 1860 in the hosiery and glove industry. One of the most successful boards was in the coal industry. With the help of conciliation boards, the industries in Durham and Northumberland succeeded in establishing sliding scale committee. This type of attempt, however, did not succeed in some of the other industries as the workers demanded that before a sliding scale committee was set up, a minimum wage should be fixed.

In the last quarter of the nineteenth century the trade union movement spread in all directions though during periods of depression its membership declined. The early trade unions mostly consisted of skilled workers, but after 1880 their ranks were joined by unskilled workers too. One of the successful strikes of the unskilled workers was the London dock workers' strike of 1889. Their success encouraged a number of unions of unskilled workers. The spirit of unionism also spread to agricultural workers and for some time they succeeded in organizing their unions; but the opposition of the propertied classes was too strong to be resisted by them. Among the railway workers a union was started as far back as 1871, but

the real growth came after 1890 when the Amalgamated Society of Railway Servants was formed. Even the membership of this body was small by the end of the century.

The most important development of this period, however, was the growing influence of socialism on workers. The socialist influence worked as a binding force and brought together workers of different shades of opinion. Consequent upon this the aims of trade unionism also changed. By the end of the century, therefore, the feeling that it was the duty of the state to provide sickness, unemployment and old age benefits became strong. The state could be made to realise this responsibility only if the labourers could become politically strong. Though representatives of labourers were elected to the Parliament for nearly two decades, there was no regular party and programme and they usually voted with the liberals. In 1893, therefore, the Independent Labour Party was formed to stand by a socialist programme and represent the opinions of workers. It was after a long persuasion that Trade Union Congress gave its recognition to it in 1898.

The twentieth century opened with disappointing developments for trade unionism. In 1900, the workers on the Taff Vale Railway went on a strike and the company sued for damages and for an injunction against picketing. The company succeeded and secured an award for damages worth £23,000. This struck at the roots of unionism as hereafter the funds of trade unions would not be free from attachment by courts. The Trade Disputes Act of 1906, therefore, was enacted and it provided that trade unions were not liable for damages for the wrongful acts of their members and that picketing was legal. This amendment of law was followed by a number of strikes on the railways. But to the chagrin of the trade union-

ists, they were put to a second test in 1908. A railwayman named Osborne filed a case to prevent his union from using its funds to finance the election of candidates to the Parliament. He won the case. This cut at the roots of the Labour Party and dashed to the ground all hopes of the labourers in the political field. After a long controversy, the Trade Union Act of 1913 permitted trade unions to raise a separate fund for political activities but contribution to it was not to be compulsory.

On the eve of the last Great War, the membership of the trade unions had reached nearly 4,225,000. When the war broke out, the trade unions decided to stand by the government and their trade practices were suspended in the interests of the nation. In spite of this, there were serious outbreaks of labour unrest in 1916-17. The government, therefore, appointed a commission under the chairmanship of J. H. Whitley. Its recommendations did not satisfy labourers. In 1919 when the membership had reached nearly 8,500,000, there were again serious outbreaks of labour trouble. Government, therefore, summoned, a joint conference of employees of all trades at Westminster on the 27th February 1919. It was attended officially by the Prime Minister and the Labour Minister. The conference declared itself in favour of an eight hours day, legal minimum wage and universal recognition of trade unions. A National Industrial Council was formed for conciliation. The labour unrest, however, was not pacified by these steps and it found expression in the political activities of workers. In the 1922 elections, the Labour Party secured 122 seats in the House of Commons and became the official opposition. It even formed the government for ten months in 1924.

The depression in the post-war period had resulted in the unemployment of many. Attempts at wage

reductions were made by employers. With the growing political consciousness, the workers resisted these attempts with strikes. The struggle came to a head in the coal industry in 1926 when the Council of the Trade Union Congress declared a sympathetic general strike. The suffering of the people in this period of the strike was great. The government consequently enacted a measure which had a reactionary effect. The Trade Disputes and Trade Unions Act of 1927 provided that (1) a strike was illegal if it had an object beyond the furtherance of a trade dispute in an industry in which the strikers were engaged and if it was designed to coerce the government either directly or by inflicting hardship on the community ; (2) once a strike was declared illegal, the protection conferred on the trade union funds by the Act of 1906 would disappear ; (3) the civil servants shall not join trade unions with political affiliations ; and (4) that an injunction may be granted by the Court at the request of the Attorney General restraining the application of trade union funds in contravention of the first provision. Thus the activities of trade unions were rendered very difficult by placing them at the mercy of judges and juries. Since then the membership of the trade unions has also been fluctuating because of the depressed state of trade and industry. In 1936, the membership was in the neighbourhood of 5 millions. In the political field, however, labour had some further successes to its credit. The Labour Party formed the government from 1929 to 1931. In the elections of 1935 labour polled 8 million votes in a total of 30 millions and secured 100 seats in the House of Commons.

Trade unionism in England has attained such a position to-day that it has to be reckoned with by the employers as well as the government as a great force in preserving industrial peace. Collective bargaining

and representation in the Parliament have been useful in securing to the main body of workers better wages, shorter hours of work and provision against unemployment, accident, invalidity and old age. The rigidity in wage structure which developed in England in the post-war period is, though it had undesirable effects in other directions, a testimony to the collective strength of labourers. The trade unions have not also neglected the intellectual and social progress of workers. They have established schools and built libraries. The labour press devoted to the cause of workers has given them an opportunity to express their views through its columns and has also provided the means of discussing the social as well as political problems that confront workers. Trade unionism, therefore, is a living force in England.

Labour Legislation

The need for protective labour legislation arose after the Industrial Revolution. Before this the relations of workers with employers were not certainly hostile and the conditions of work were not always oppressive. To the workers it was a pleasure to produce goods by their skill of which they had reason to be proud. The Industrial Revolution changed the conditions completely. Thousands of workers were drawn to towns who had nothing else to sell but their labour. Inside and outside the new factories the conditions of life and work were, to say the least, shocking. And yet the workers had no power to ameliorate them because they had no voice in the local as well as the national government. The Parliament which at one time legislated on the regulation of industry was withdrawing from this field of its work by the growing influence of the doctrine of laissez-faire. This rendered any help from the state to workers difficult. It was only after the Humanitarians made their voice

heard and the horrors of industrial life became incapable of being ignored that the Parliament was actuated to interest itself in the protection of labour. The scope of labour legislation and its effective enforcement, however, developed gradually as the strength of trade unionism increased and the influence of laissez-faire began to wear out.

The earliest of Factory Acts was the **Health and Morals of Apprentices Act of 1802**. It mainly applied to the pauper children who were apprenticed in the new factories. Before Peel enacted this ~~measure~~, the conditions in the textile mills were appaling. One of the writers has described them in the following words : "The early textile mills often worked continuously for twenty-four hours a day, and the only limit to hours was that of physical exhaustion. The children were herded in sheds and as one shift arose from the beds another tumbled in, so that they were never cold. The hard physical labour they performed resulted in bodily deformities, and accidents from unfenced machinery were only too common. Foremen were chosen for their power to get the maximum amount of work from them, and they were often flogged with whips to keep them awake and make them work harder. They were fed as cheaply as possible on the coarsest of food, and those who survived—n: any of course did not—grew up with stunted ricketty bodies and warped twisted minds, brutalised by their appaling childhood".* The Act was passed to remedy these conditions but it failed in achieving anything substantial. It limited the hours of work of apprentices to twelve per day and prohibited night labour altogether. They were also to be taught arithmetic, reading and writing. The enforcement of the Act was left to the justices of peace. Their negligence and the evasion by employ-

* Irving. An Introduction to Economic History, p. 213.

ers rendered the Act futile for all practical purposes.

When the Napoleonic wars came to an end, the efforts of Peel and Robert Owen and the findings of a committee of the House of Commons led to the passage of the Factories Regulation Act of 1819. It was applied to cotton textile mills only. It fixed the minimum age of employment at nine years and protected children between the ages of nine and sixteen. The Act applied to all children irrespective of their terms of employment. The twelve hours day now included an hour and a half for meals. The maximum day on Saturday was fixed at nine hours.

The Act aroused a great deal of resentment among the textile mill-owners. It also did not satisfy the workers and social reformers. In the next decade, therefore, there was further agitation for the improvement of the factory law. Social leaders like Oastler, Owen, Hobhouse, Michael Sadler and Ashley Cooper did a great deal to arouse public opinion in favour of legislative protection to labour. In the same period, by the Act of 1825 trade unionism was legalised and in the next ten years a number of experiments were made in the organization of labour. Though the voice of the workers was not a factor which could influence the Parliament, it could not ignore the possible effects of the organization of workers. Unfortunately, however, the laissez-faire influence on the Parliament was growing and it could not have agreed to a measure not in keeping with the spirit of the doctrine. Michael Sadler put the Parliament to test by introducing in 1831 a bill for universal ten-hours day. It failed to pass but the failure was followed by agitation on a greater scale. The Parliament was forced to appoint a commission next year with Sadler as its chairman to investigate the conditions in factories. The efforts of the commission were crowned with partial success by the enactment of the Factory Act of 1833. The

Act applied to all textile factories and with some exceptions to the silk industry. The hours of work for children between the ages of nine and thirteen were fixed at nine hours a day or forty-eight hours a week; for young persons between the ages of thirteen and eighteen, the hours were fixed at twelve hours a day and sixty-nine hours a week. These hours included an hour and half for meals per day. Further a certificate of age was required before children were employed to stop the evasion of the Act. For the first time night work was defined as between the hours of 8-30 p.m. and 5-30 a.m. and no person below the age of eighteen was permitted to do it. The Act also prescribed two hours of schooling per day for all factory children. To enforce the measure, factory inspectors were appointed with necessary powers. These inspectors were required to submit a report to the Parliament four times a year and hold conferences at least twice a year.

The Act of 1833 did not satisfy as might be expected the leaders of social reform. It did not apply to women and adult male workers. The agitation for further reform, therefore, led to changes in the Factory Act from time to time. Though the Act of 1844 reduced the minimum age of employment to eight, the hours of work for children between the ages of eight and thirteen were fixed at six and a half hours a day. The restrictions applicable to young persons were also made applicable to women. Thus for the first time adult labour was protected. Fencing of machinery was made compulsory and young persons were prohibited from being employed for cleaning it. It also provided for money compensation in cases of injury from unprotected machinery. Three years after this the agitation for ten-hours day led to the passage of the Act of 1847 which fixed the day at ten hours for women and young persons. This provision was, how-

ever evaded. Hereafter for the next twenty years minor changes were made in the Factory Act by occasional amendments. In 1850, the normal working day was fixed between 6 A. M. and 6 P. M. in summer and 7 A. M. and 7 P. M. in winter. In 1856, fencing of machinery was restricted to those machines with which the protected persons were likely to come into contact. Further in this period the scope of regulation was extended to include provisions regarding health and sanitation. In 1864, the Act was made applicable to non-textile trades like pottery, match-making, cartridge-making and others. In 1867 even workshops were brought under control. The Factory Acts Extension Act and the Workshops Regulation Act of 1867 for the first time defined a factory and a workshop. A factory was defined as a place where fifty or more persons were employed and mechanical power was used. A workshop was any place controlled by an employer including a workshop where children were employed by their parents. Thus the legislation of this period brought under the control of government inspectors all industrial establishments. This was no doubt the result of the growing influence of the labour movement in England. Though legislation was still deficient in many respects, the achievement could not be regarded as small in view of the laissez-faire attitude of the Parliament.

The Factory Act of 1874 made some further changes in the law. It fixed the hours of work for women and young persons at ten per day and fifty-six and half hours per week; in the enforcement of this provision, the hours of work of male workers also had to be adjusted to it. The minimum age of employment was also raised to nine and after one year to ten. The age of protection for children was raised to fourteen. Silk mills which previously were given certain privileges were brought in line with other textile mills.

By this year the factory legislation had become very complicated and, therefore, after three years, it was codified in the Factory and Workshop Act 1878.

In the next decade legislation was undertaken which aimed at the protection of the health of workers. The Factory Act of 1883 provided rules for the protection of the health of the white-lead workers. It required that such workers should be provided with respirators, hot and cold baths and acidulated drinks. The Factory Act of 1889 laid down conditions regarding humidification in the cotton textile factories. In 1891, the minimum age of employment was further raised to eleven and by an amendment of 1895, the hours of work for children in all cases were limited to thirty per week. In 1896, the doctors were directed to notify to the factory inspectors cases of occupational diseases if treated by them.

By the end of the century, the need for further codification of law was felt necessary and, therefore in 1901, the Factory Act was codified again. This Act has remained the basis of the present factory legislation in England though some changes were made thereafter particularly in regard to the employment of children. The minimum age of employment hereafter was governed by the school leaving age. It was raised to twelve in 1901 and to fourteen in 1918.

Since 1901, no important changes have been made in the Factory Act though England has ratified a number of conventions passed by the International Labour Organization. As a result of collective bargaining, however, many changes have been introduced in working conditions. The normal working week in England is 47 to 48 hours and in many cases as short as 43 to 44 hours. In 1936, the Parliament pressed for the ratification of the Forty-Hour Week Convention to provide work for the unemployed. The government pointed out the practical difficulties of introduc-

ing the change. However, a Factories Bill Campaign Committee was formed by the interested parties which demanded a forty-eight-hours week for men and a forty-hours week for young persons under 18 years of age. The government introduced a bill in 1937 embodying measures for health and safety and a forty-eight-hours week for women and young persons. It was referred to a standing committee in February 1937. It was passed in July, 1937. It has fixed the maximum hours of work for women at forty-eight-hours a week; the hours of work of young persons under sixteen have also been fixed at forty-four per week.

The factory legislation in England is still incomplete and changes may be introduced in future as the power of the labour organizations makes itself felt in the Parliament. There are also admitted defects in the enforcement of the existing legislation though it must be admitted that in recent years the inspectors have materially contributed to the improvement of conditions within the framework of the Factory Act. But the deficiencies of the executive have been, as said before, made up by the power of collective agreements which trade unions have been able to force on employers.

Mines Acts And Regulations

Mining industry has been regulated by separate legislation in all industrial countries because of the special conditions prevailing in it. In England, however, little attention was paid to its regulation before 1842 and the conditions of work in the mines were horrible. There was no proper system of draining of water or provision of ventilation and explosions and cases of poisoning were quite frequent. Women and children were engaged underground. In Scotland the proportion of women to men was four to one. The working day was generally of fifteen hours and in

some cases even longer. Yet the wages paid were poor. Skilled men received 10s. a week while women and children received two shillings and a few pence respectively. The child labour was grossly abused as children were employed from the age of three upwards and worked from 4 A. M. to 5 P. M.

After an investigation into these conditions by a commission, the Parliament passed the Coal Mines Regulation Act of 1842. It provided that no boy under the age of ten was to be employed or even apprenticed and women were disallowed from working underground. In 1850 four government inspectors were appointed to enforce its provisions. In 1860, the minimum age of employment was raised to twelve and hereafter it was further raised according to the requirements of the Education Acts. In 1855 and 1862 regulations were introduced regarding the fencing of shafts, provision of brakes and ventilation. In 1872 the existing law was codified and mine managers, and subsequently even under-managers, surveyors, foremen and deputies, were required to hold a certificate of competency. In 1881 the Home Secretary was permitted to hold enquiries into the causes of accidents occurring in the mines.

Mining legislation made further progress in the twentieth century. The efforts of the Miners' Federation started as far back as 1841 resulted in securing regulation of the hours of work and minimum wage in the coal industry by the Acts of 1908 and 1912. The hours of work of underground workers were fixed at eight hours a day and district boards were set up to fix minimum wage for the workers in mines in the districts to which they were attached. In 1911, the mining law was codified again and in 1920 the Mines Department of the Board of Trade was given power to legislate on minor points arising from the working of the Acts. Since 1920 the mining industry has been

in a very unsettled condition. As a result of the strong demand of the workers, in 1920 a seven-hours day was introduced in the coal industry and a National Wages Board was set up to fix the minimum wage. But the unrest of the workers instead of being reduced culminated in the general strike of 1926. This led to a reactionary move on the part of the government and in 1926 by the Coal Mines Act the eight-hours day was restored again.

Social Insurance and Other Legislation

Social insurance has been regarded as essential to the conservation of the human wealth of a nation. Action in this field was taken early in Germany at the instance of Bismarck. In England action was delayed until the first decade of the twentieth century. In 1905 a Royal Commission on the Poor Law administration was appointed. It submitted its report with far-reaching recommendations in 1909. This led to the enactment of the National Health Insurance Act of 1911. It provided against sickness and unemployment.

In regard to sickness, the Act was made applicable to all manual workers and non-manual workers whose annual income was less than £160. The benefits provided by the Act to an insured worker were : (1) free medical attendance and medicines and treatment in sanatoria if necessary ; (2) after a certain number of contributions were paid, a cash allowance of 10s. a week to a man and 7s. 6d. to a woman during illness ; (3) a disablement allowance after 26 weeks of continued illness and (4) a sum of 30s. to the wife of an insured worker on her confinement. The finance necessary for the purpose is found from contributions by workers, employers and the treasury. Few changes have been made in the underlying principles since 1911 ; the subsequent legislation has merely made changes in the scale of contributions and benefits. At

present more than thirteen million workers are covered by the scheme and it has worked successfully without much burden on the state. This would be apparent from the following figures :—*

	Payments made £millions	Contributions levied £millions
1913-14	14½	17
1923-24	24½	26
1933-34	32	26

By the Old Age Pensions Act of 1908 provision was made for the aged dependents. Every person reaching the age of 70, provided his income is below a certain level, is paid a pension of 10s. a week and the cost is borne by the treasury. Those who receive poor relief are not eligible to receive it. The sickness insurance scheme was also supplemented in 1926 by introducing contributory pensions scheme for the widows and orphans of the insured workers. According to it, the insured persons are eligible for pensions between the age of 65 and 70. Benefits are also provided for widows and orphans of the insured persons under this scheme.

The most comprehensive scheme of relief, however, is the unemployment insurance introduced by the National Health Insurance Act of 1911. In the beginning it was applied to those industries only in which unemployment was chronic. These were the house-building, ship-building and engineering industries. Contributions were collected from workers and employers, and were supplemented by the state. The labour exchanges set up by an Act of 1909 were used for keeping records of the unemployed. After a certain number of contributions were paid by a worker,

* G. D. H. & M. I. Cole, *The Condition of Britain*, pp. 328-29.

He was entitled to a weekly unemployment benefit of 7s. for a maximum period of 15 weeks in each insurance year.

During the last war when unemployment nearly vanished, the scheme appeared to be successful. By 1921 the fund had accumulated to £21 millions. This encouraged the Parliament to extend the scheme to all workers. The scope of the scheme was extended by the Unemployment Insurance Act of 1921 to all manual workers and non-manual workers earning less than £251 per year. Certain classes of workers who were not suffering from this malady were excluded from its operation. In all it affected 12 million persons. The Act increased contributions and benefits. The weekly cash allowance was increased to 15s. for men and 12s. for women for a maximum period of 15 weeks. In 1921, further changes were made by introducing benefits for dependents and benefits beyond the statutory period known as unconvenanted benefits. The extension of the scheme unfortunately coincided with a prolonged period of depression and the fund was drained away completely and had incurred indebtedness to the extent of £21 millions in 1926. Though some changes were introduced in 1927 on the recommendations of the Blanesburgh Committee of 1926, the scheme failed to show any improvement and in 1931 the indebtedness amounted to £61 millions. After some changes in 1931, it was expected that the position would improve but instead it deteriorated still further with the effects of the depression of 1931-33. In 1931 when the debt had accumulated to £100 millions, on the recommendations of a Royal Commission on Unemployment Insurance of 1931 the contributions were increased and the benefits and their period were reduced. These were, however, transitional measures. In 1934, therefore, on the basis of the final report of the Commission, the scheme was reorganized. The

unemployed were divided into three categories according to eligibility for (1) insurance benefits, (2) unemployment assistance and (3) public assistance. The second is provided after the statutory benefits have been exhausted and the third is given under the Poor Law. The cuts made in benefits in 1931 were restored. Thus the benefits given to-day are 17s. for men, 15s. for women and additional dependent allowances. In 1936, the scheme was extended to agricultural workers also with lower contributions and benefits.

The introduction of the unemployment insurance in England certainly came as a great relief to the workers. The scheme, however, became unsound in many respects after the changes introduced in 1921. The effect of this unsoundness was to make it financially unworkable. The following figures for selected years will show how the income under the scheme could not meet the expenditure :*

Contributions levied (£ millions)	Payment made (£ millions)
1913-14	½
1921-22	53
1929-30	46
1930-31	92
1931-32	111
1932-33	104½
1933-34	88½
1934-35	46
	2
	30½
	30½
	29½
	33
	38
	39½
	42

As in Germany there is no insurance system for accidents in England. Upto 1880 a worker who was injured by an accident could claim compensation from the employer by instituting a suit in a law court. No compensation was, however, given if the accident was the result of the negligence of a fellow worker. This

* *Ibid*, pp. 328-29.

drawback was removed by the Employers' Liability Act of 1880 which defined the responsibility of the employer in regard to fencing and provided that compensation was payable even when the accident had occurred by the negligence of a fellow worker. The scope of the Act was extended from time to time by subsequent legislation known as Workmen's Compensation Acts. The consolidated Act of 1923 applies to nearly all workers in factories and mines. Compensation is payable even when the employer is not guilty of negligence on his part. A worker who is totally incapacitated is paid half the wages up to a maximum of thirty shillings per week; in the case of partial incapacity, the difference between his former earning and actual earning is paid to the worker. If the accident results in death of the worker, the widow is given a sum between two hundred to three hundred pounds and allowances are paid to the children up to a maximum of six hundred pounds. With this responsibility of the employers for accidents, they usually take out insurance policies against their legal liability. But this is not compulsory. The sum paid out by way of compensation was $3\frac{1}{2}$ millions in 1913-14; recently it has increased; in 1934 it was £ 6 millions.

Chapter VIII

GROWTH OF THE CO-OPERATIVE AND SOCIALIST MOVEMENTS

The co-operative movement in England was launched by workers. After the Industrial Revolution started when workers migrated to towns and were employed in factories, they realised that they were at the mercy of employers as wage-earners and of middlemen traders as consumers. They were threatened with exploitation on both the sides. They, there-

fore, tried to protect themselves as wage-earners by organizing trade unions and as wage-spenders by starting co-operative societies. The inspiration for organizing co-operative institutions came from the experiments of Robert Owen. Though his experiments of establishing a co-operative industrial village and a labour equitable exchange did not succeed, they supplied to the workers the lines on which to direct their thought.

The English Consumers' Co-operative Movement started with the establishment of the Rochdale Equitable Pioneers in 1844. Twenty-eight flannel weavers who had saved a pound each contributed it to the capital of the organization. They started, to begin with, a small shop in the Toad Lane, Rochdale, where groceries were sold to the members. This experiment succeeded well on account of the underlying principles which came to be known as the Rochdale Plan. These principles were to : (1) sell goods at market prices, (2) divide profits quarterly among members according to their purchases, (3) collect capital by instalments, (4) pay 5% interest on capital, (5) allow no credit and (6) to spend a part of the earnings on education and self-improvement and to settle all matters by equal vote irrespective of the shares held by any member. The success of the Rochdale society could be seen from the following figures :

	Members	Sales
1845	74	£710
1855	1400	£44,902
1865	5326	£196,234
1875	8415	£305,657

The Rochdale society also added new lines to its business. Their business was extended to linen and woollen goods in 1847, to meat in 1850 and to bread in 1867. In the last year they established their own bakeries. In the meanwhile the movement was

spreading to other parts of the country, more particularly to the North of England and the South of Scotland.

The progress of the movement, however, was not smooth. The difficulties met with in the early years were many. The local wholesale traders put obstacles in the way of the new societies by refusing to sell them goods. The members who were indebted to local traders could not escape from their clutches easily and had always the temptation to avail themselves of the easy credit offered by them. In many instances societies suffered from the dishonesty of their managers. But the greatest difficulty was their uncertain legal position. The common law was unfavourable to them in many respects. They could neither deal with non-members nor hold land exceeding one acre nor loan money to other societies nor sue their officers for misuse of funds or embezzlement. Each member was also responsible for all the debts of the society. These legal disabilities were removed by the legislation of 1846, 1852 and 1862. By the last Act they were allowed to incorporate with limited liability.

The effects of the improvement of law were immediate and encouraging. In 1863 there were 454 Rochdale type of societies of which 381 had a membership of 108,000 persons and an annual business of £2,600,000. Co-operation also spread to wholesale trade and production. The English Co-operative Wholesale Society was started in 1853. In 1862 there were 113 productive societies engaged in the production of cloth, boots and shoes, etc. An attempt was also made to organize life insurance on co-operative principles in 1867 but the scheme did not start working until 1886. The period was also noteworthy because of the spread of co-operation to agriculture. Nearly 60 societies were started but hardly 6 of them succeeded.

In the third quarter of the nineteenth century, the movement entered a new phase. In 1869 a co-operative congress was held at which the co-operative societies were represented. Since then it has become a regular feature of the movement. At the first congress a co-operative union was started of all the societies and it elected a central board. The country was divided into seven districts and the board consisted of seven sections to represent them. The work of the board as constituted to-day consists of issuing journals, holding examinations, collecting statistics and undertaking propaganda. Besides these bodies co-operative guilds were started for men and women workers.

After the experimental stage was over, the movement continued to grow. This growth was aided by the changes made in law by the Provident Societies Act of 1876 and 1893. This latter Act governs the co-operative societies in England to-day. Since 1875 the English Co-operative Wholesale Society has shown great enterprise. In 1871 it had started a loan and deposit department. It was later on converted into a regular bank. In 1935, this bank had 68,204 accounts and had made advances and allowed overdrafts worth £2,569,453. Life insurance was also undertaken by it in 1886 and to it was added industrial insurance in 1899. After the National Health Insurance Act was passed in 1911, it started a branch relating to health insurance in 1912. In 1926, it had 1,300 agencies and 220,000 members. The E. C. W. S. also ventured in the field of shipping in 1876 by starting a regular service between Goole and Yorkshire.

In spite of the many obstacles placed in the way of the movement by industrialists and traders, it has made a remarkable progress. Following are the figures of its progress.

Retail Societies					Wholesale Societies				
Number	Members	Sales	(In millions)		1901	£	5	Capital Sales	(In millions)
1901	1,455	1.8	£	53	1901	£	5	£23	
1931	1,159	6.5	£	208	1931	£	89	£99	

The above figures clearly show that the Consumers' Co-operative Movement has been well established in England. The movement, however, has not spread to the field of agriculture as in Denmark, Germany and other continental countries. No doubt there are a number of societies in the dairy industry but the progress in agricultural credit, farming, purchase and sale has not been conspicuous. In the post-war period, with the policy of establishing small farmers on land, the government has been making attempts to encourage societies for these purposes to help the small farmers secure the same facilities as are available to the big landowners.

With the growing political consciousness of the workers the desire of the co-operators to enter politics became very keen. The question was first raised by William Maxwell in his Presidential address to the Perth Congress in 1897. It became a controversial subject in the following years and no decisive step was taken until 1917 when at the Swansea Congress a Co-operative Parliamentary Representative Committee was set up. This body succeeded in establishing a Co-operative Party in 1920. In 1926 there were five members in the Parliament representing the party. But as the interests of this party were identical in many respects with those of the Labour Party, after long debates, a working agreement was signed between the two parties in 1927. Thus co-operators work with labour representatives on political issues that face them in the Parliament.

Ever since its inception the movement has paid great attention to education. A part of the funds of

the societies are devoted to it. When, however, the state shouldered the burden of education, the co-operators gave less attention to it. The number of workers in the productive co-operative societies to-day has become large and hence recently attention is also being paid to their welfare.

The Growth of the Socialist Movement

The social structure which came into existence in Europe after the third quarter of the eighteenth century was a product of the French ideas and the English technique. The French revolution of 1789 ushered in an era of individualism which spread, in the course of time, from France to other countries. By laying stress on the rights of the individual it brought about the disintegration of the old society based on the prevalence of custom and status. Old ties, social and economic, vanished. The ideal of the reformers of this period was to build a society in which the individual had the maximum of freedom in his social, economic and political activities with the minimum of interference from either other individuals or the state. The classical economists also supported the new ideal by preaching that if man was left free, his activities guided by "enlightened self-interest" would lead not only to his prosperity but the prosperity nations and the world. In short it would achieve the greatest good of the greatest number. The state in many countries, therefore, was led to adopt, as the custodian of the interests of the nation, a policy of *laissez-faire*, i.e., let things alone, leaving the individual to fashion his own life as best as he could guided by his self-interest and reason. A new society based on selfishness came into existence in the European countries.

The second factor in the evolution of the European society was the English technique. The Industrial Revolution in England gave rise to capitalism in a new form and created many social and economic problems.

While it brought prosperity to England and then to other countries, as the new means of production came to centre in the hands of a few individuals, the bulk of population was turned into an army of wage-earners without any proprietorship in land or machines, the instruments of production. The wealth of the former class continued to grow but the labouring classes whose wages did not increase proportionately always lived a miserable life and were haunted with the fear of unemployment. As said in the previous chapters, the conditions of work and life were such that merely animal needs were satisfied. There was also very little chance for a worker to rise to the position of a captain of industry. The relations of workers and employers were in no way cordial. It was no wonder, therefore, that these economic differences between the two classes became so glaringly distinctive that the society began to be looked upon as consisting of two separate classes, the capitalists and the proletariat. To all these changes the state took an attitude of an onlooker.

These social and economic developments led to heart searching amongst thinkers. All of them agreed that all was not well with the existing order of things. A group of such leaders felt that there was nothing fundamentally wrong with capitalism but that it required to be reformed to increase its usefulness to community. Hence an attempt was made by the government guided by them to pass factory acts, permit trade unionism, improve housing conditions and give free education. In short it attempted to establish welfare capitalism. But this did not satisfy those who believed that capitalism was basically wrong and it could never lead to the well-being of the masses. They, therefore, insisted that it should be swept away and the basis of the society should be remodelled. The solution which they proposed was socialism.

The term socialism became current in the economic terminology after it was loosely used for some time in the early co-operators' congresses. It is difficult to give an accurate and precise definition of the term because it has been used by many persons in different senses. Yet all of them agree that the present system of private property, enterprise, profits, interest and rent should be replaced by collective ownership of the instruments of production. From this common measure of agreement attempts have been made to give fairly acceptable definitions of socialism. John Stuart Mill defines it by saying that "What is characteristic of socialism is the joint ownership by all the members of the community of the instruments and means of production, which carries with it the consequence that the division of all the produce among the body of owners must be a public act performed according to the rules laid down by the community". Prof. Ely says that the results of the analysis of socialism may be brought together in a definition which would read somewhat as follows : "Socialism is that contemplated system of industrial society which proposes the abolition of private property in the great material instruments of production, and the substitution therefor of collective property ; and advocates the collective management of production, together with the distribution of social income by society, and private property in the larger proportion of this income".* "The fundamental character of socialism consists", says Maurice Dobb, in its abolition of the class relation which forms the basis of capitalist production through the expropriation of the propertied class and the socialisation of land and capital".* From these definitions it becomes possible

* Ogg & Sharp *Economic Development of Modern Europe*, p. 462.

* Maurice Dobb : *Political Economy & Capitalism*, p. 273.

to sum up the chief characteristics of socialism. Firstly, it proposes to abolish private property which forms the basis of the present capitalist society. It does not, however, mean that individuals will not be allowed to keep their personal belongings. What is aimed at is that the instruments of production and distribution like land, factories, railways, etc., and all other forms of private wealth which may give rise to "unearned increment" should be withdrawn from private hands. Secondly, these instruments should be vested in the state with a view to common enjoyment of their fruits by the members of the community. Thirdly, as required by such a state every individual shall contribute his labour to the community's production. The labour so contributed may be manual or intellectual. There would be, however, no place for the leisure class in such a community. If these fundamental changes were introduced they would establish a new relationship between land and capital on the one hand and labour on the other.

As regards the methods of achieving this social change there is much disagreement amongst the socialists. The school of thought led by Karl Marx believes that the new order cannot be established without a revolution because any attempt to suppress the power of one class to exploit the other by compulsory socialisation of land and capital would be resisted by such a class. The propertied classes would never surrender their power unless they are compelled to do so. The communist manifesto published in 1847, therefore, gives its watch-word to the workers: "Workers of the world unite; you have nothing to lose but your chains, you have a world to win". Karl Marx who was a Prussian Jew born in 1818 came to England in 1848 after being persecuted by the Prussian government. He remained there until his death. His great contribution to the socialist thought

is the book which he wrote under the title 'Capital'. The influence of Marx in his life time and even after his death was great. There are others who believe that the end in view could be achieved by peaceful means though slowly. As is evident from the subsequent growth of socialism, the younger generations in all the countries were greatly influenced by the Marxian thought.

In England though a school of radicals existed in the last quarter of the eighteenth century, its activities were mainly directed to parliamentary reform. The preaching of socialism really began with Robert Owen (1771-1858). As the Napoleonic wars came to an end, the economic conditions in the country took a serious turn for the workers. Wages fell; unemployment was threatened; and the cost of living rose. Attributing their sufferings to machinery, workers started rioting and breaking machinery. Robert Owen, himself a manufacturer, saw in this outbreak of labour unrest the inevitable struggle of workers with employers in a system based on capitalism. To him it became clear that the conditions of workers required to be improved. With this end in view he tried many experiments which marked the beginning of socialism in England. One of such experiments which he tried was at New Lanark on the Clyde in Scotland. Here he attempted to set up a community which worked with the ideal of service rather than profit. It was managed on a democratic basis with equality of opportunity for all the members. It looked after the aged and the sick and provided free education to all. There were to be no individual saving and no idlers. In 1813 in the essay published under the title, *A New View of Society*, he put forward his ideas. He pleaded for the improvement of environment which definitely influences human character and for putting a check to profit motive, which so long as

it was given free rein, would leave the workers in miserable condition. In the later pamphlets published by him, he advocated the establishment of co-operative communities as a solution of the existing evils. Gradually, however, his ideas drifted towards communism and he demanded the abolition of profits, speculation, money and nearly the whole machinery of exchange. He tried some of his experiments in America also. But nearly all his experiments failed because of his failure to turn the course of human nature and lack of help from others after the death of those philanthropists who had supported him in the beginning. In 1835 he made an attempt to form an Association of All Classes of All Nations without any conspicuous success. Though Owen's experiments failed, he made a great contribution to human progress. The propertied classes were awakened to the gravity of unchecked progress of capitalism without amelioration of workers' conditions and the radicals were set thinking about plans of permanent social improvement. His greatest contributions, however, is the idea of co-operation which to-day has flowered into a net-work of co-operative enterprises in many countries.

After the failure of Owen's experiments, for some time workers' attention was directed to political reform. The Reform Act of 1832 had come as a great disappointment to them as the new franchise being limited in scope did not confer any rights on the bulk of workers. The Chartist movement was born of this disappointment and was directed towards governmental reform. Like trade unionism, socialism did not make any progress in England until the final failure of Chartism in 1848.

About this time a group of leaders started agitation for social reform by denouncing the laissez-faire doctrine as preached by Cobden and Bright and by the application of the teachings of theology to social pro-

blems. The founders of this movement were Denison Maurice, Charles Kingsley, Thomas Huges and John M. Ludlow. The movement came to be known as Christian Socialism. The Christian Socialists did not succeed in putting forward a clear programme. They were, however, opposed to materialism which characterised the early socialist movement.

In the second half of the nineteenth century, in spite of the growing influence of the laissez-faire doctrine, the government introduced many social reforms in the economic field. The country also prospered with the growth of industries. The franchise was extended to a large portion of the urban population after the Reform Act of 1867. The workers' organisations, trade union as well as co-operative, increased in number and strength. In these conditions, with the conservatism of spirit which characterises the English people, the workers' revolutionary fervour lost some of its heat with the passage of time. From among them those who did not want a revolution joined the ranks of trade unionists. All the early socialist movements had either died out or had become defunct. But this period could be regarded as a lull before renewed activity. This period has been, therefore, described by saying that "Hitherto the people had ideals without organisation; now they were creating organisation whose chief defect was a lack of ideals."*

The socialist movement which had received a setback for sometime showed signs of revival after 1880. In the last quarter of the nineteenth century England passed through serious effects of recurring trade cycles. On a number of occasions, the workers' organizations had come out successful in their fight with employers

* Ogg and Sharp, *Economic Development of Modern Europe*, p. 182.

and this success had created faith in them in their growing effective strength. The spread of education and the extension of press had created enlightenment among them. The socialist movement on the continent also had demonstrated great energy. It was, therefore, but natural that a renewed interest should be shown in England in the movement for social revolution. The second phase of the English socialist movement started with the establishment of the Democratic Federation at London in 1880. It came to be known later as the Social Democratic Party. Its leaders were William Morris, John Burns, Tom Mann and Hyndman. Splits occurred in its ranks quite early in its career. The right-wing members reorganized themselves under the name of the Social Democratic Federation and abided by the Marxian programme. It conducted two papers, *Justice* (a weekly) and the *Social Democrat* (a monthly). Because of its revolutionary programme, at no time its membership was very large.

The second socialist party which was born in this period was the Fabian Society established in 1883 mainly by men of letters. Among them were Sidney Webb, George Bernard Shaw, Graham Wallas and many others. They believed in the use of peaceful methods in socialist agitation. Hence they were dubbed as arm-chair socialists. Their contribution to socialist literature has been considerable. Their appeal was mainly to the middle and upper classes. The views of the Fabians were put forward through the columns of the *New Statesman* founded in 1914.

Though these fresh beginnings in the socialist organization were welcome signs of the revival of the movement, the workers as a whole did not show any enthusiasm until the Independent Labour Party was formed in 1893 under the leadership of Keir Hardie. One of its declared aims was to bring about "collective

ownership and control of the means of production, distribution and exchange". Thus its programme was socialistic and to carry it to the masses it made a wide use of the press. Among many of its journals, the Labour Leader (a weekly) and the Socialist Review (a quarterly) were prominent. Probably because its programme was too radical, the Trade Union Congress did not give it its recognition until 1898. For the same reason its appeal to the orthodox section of labour was not very effective and after 1900 a separate organization, the Labour Party was started with a non-socialist programme. Gradually it also showed its inclination towards socialism as may be seen from a resolution passed in 1907 demanding the "socialisation of the means of production, distribution, and exchange to be controlled in a democratic state in the interests of the entire community, and the complete emancipation of labour from the domination of capitalism and landlordism, with the establishment of social and economic equality for the sexes" The Labour Party, therefore, became identified with social reform envisaged by socialists and continued to hold an important position in the English socialist movement.

Before the Great War, therefore, the socialist movement had taken roots in England. The growing volume of socialist thought and influence had its effect on the activities of the state. Factory, sanitary and social insurance legislation rapidly multiplied from decade to decade. In the sphere of local government also many undertakings were started for the improvement of the conditions of the masses. But the socialist movement was not soundly organized as in Germany. Its members generally believed in the evolutionary rather than revolutionary methods. Hence they favoured political activities to achieve their ends and the success of the movement, therefore, was gauged

by the representation it secured in the Parliament.

When the war broke out the pacifist ideals of the workers' organizations were put to test. In the interest of the nation, however, the labourers threw their weight on the side of the government. They were in fact represented in the cabinet after the coalition government was formed in 1915. The Independent Labour Party, however, true to its creed, remained opposed to the war. When the war ended the political truce between the government and the labour came to end and the Labour Party started on its career of achieving political strength. In a pamphlet published in 1918 it set forward its revised aims for social reform. Stated briefly they advocated (a) a national minimum wage, (b) democratic control of industry with immediate nationalisation of railways, mines and electricity enterprise and (c) the use of the surplus revenue derived from nationalisation and additional taxation of the rich for the common good. These proposals could not be regarded as radical and were in keeping with the general tone of the Labour Party's policy.

The Parliamentary strength of the party continued to grow after the war was over and in 1924 it succeeded in forming the government when the Baldwin ministry failed on the issue of protection. It remained in office for ten months only and was unable to give effect to any of its party programme. Its only achievement was in relieving trade of many restrictions during the war but continued after it. After this political success, though short-lived, the general body of workers again attempted direct action by calling a general strike in 1926 in sympathy with the coal miners. It was an ignominious failure. The workers once again returned to parliamentary methods and the strength of the Labour Party increased. After the general election in 1929 it formed the second

labour government. It remained in office for two years but was unable to achieve any lasting social reform. It could not even repeal the Trade Disputes Act of 1927. Much was expected of the labour government, and the resulting disappointment was great. In the last ten years, therefore, its following has suffered in strength.

The explanation for the lukewarm support to the party lies in the improvement of the economic position of the workers in the last half a century and the innate conservatism of an average Englishman. G. D. H. Cole explains the lack of a strong support to the Labour Party in the following words: "It (the standard of living) is on the whole, except for the workers in the depressed areas and industries, better than it has been in the past and there is a disposition among the electors who are not to any extent politically minded to base their politics, when they are called upon to vote, rather on the desire to keep things as they are than on the hope of changing them for the better". With this attitude of the general worker it is no wonder that many persons in England do not think that socialism would be attained in their lifetime. England has not been and may not be, unless the national character and thought change fundamentally, a country of a strong socialist movement.

What has been said so far refers mainly to the socialist movement on the evolutionary lines. The influence of Marxian socialism was not, however, completely absent in England. It is not possible to make a more than passing reference to movements which originated in England with revolutionary methods. Before the Great War one of such movements was started on syndicalist lines by Tom Mann among the Welsh miners. He organized a number of strikes but without much success. Another pre-war attempt was made by a group of intellectuals to

organize a movement on the lines of guild-socialism. They proposed to create as it were two separate state organizations in a community. One of them, the guild organization was to be in complete charge of the industries ; the other, the political state, was to be entrusted with the general matters like education, justice and foreign affairs. There was, however, much disagreement amongst its supporters as to which should be the ultimate sovereign authority. In 1915 guild socialists formed the National Guilds League to create a solid front of the workers by the amalgamation of trade unions. Subsequently splits occurred in its ranks and the movement could not achieve any substantial results. In 1920 the British Communist Party was also started with a small following. It has abided since then by the Marxian faith. Besides these there have been other attempts to organize movements on Marxian lines. But for the reasons already indicated none of them progressed beyond the initial stage.

Chapter IX

THE POST-WAR PROBLEMS

All wars have two-fold effect on the economic development of affected countries. They have a positive effect in the direction of improving technical efficiency and the establishment of new industries, and, a negative effect involving, apart from the direct destruction of wealth, the dislocation of normal working of the economic and social machinery. To restore it at the end of the war to peace-basis requires great efforts and in spite of them many irreparable consequences may leave their permanent effects on the future of a country. England passed through all these experiences in the last Great War.

The understanding of the post-war economic problems of England will be facilitated by a broad review of the trend of world economic conditions after the war. The post-war years for this purpose can be conveniently divided into four periods: (1) The years 1919-20 were marked with a short-lived boom. There was a rapid rise in prices and wages and a high level of industrial activity was noticed in those countries which were less seriously affected by the war; (2) the boom was followed by a sharp recession in prices and output which continued for a period of three to four years; (3) it was followed by great efforts on the part of the belligerents to rehabilitate their economic systems. In most cases this took the form of insulating the economic systems by means of high tariff barriers; (4) between 1925-28, the currencies were stabilised and in many countries stable economic conditions were restored. Gold standard in some form or the other was restored, an equilibrium in prices and costs was brought about and the flow of international capital from the creditor to the debtor countries was revived though not in the same form and on the same scale as before the war. Though England shared with other countries the boom and the depression, in the return of prosperity she was unfortunate.

In England like other countries the war led to great financial dislocation. Before the war, the taxation of the people could not be said to be unbearably high. In 1913-14, the government collected by way of central and local taxation 11.2 per cent. of the incomes; the relative percentages in the U.S.A. and France were 6.4 and 13.3. When the war came, the necessary finance was raised by the imposition of heavy taxes and by raising loans. As the national debt increased, further taxation was required to make payment of interest due on it. Income-tax was raised from the pre-war level of 1s. 2d. to 6s. in the pound.

Though it was reduced after the war ended, the reduction was not substantial. Many other taxes also were introduced to find revenue for war finance. In the post-war period, therefore, the resulting burden was felt to be too heavy. In 1923-24, the percentage of incomes collected by way of taxes amounted to 23.2 of the incomes. The relative percentages in the U.S.A. and France, however, remained 11.5 and 16.6. This burden of taxation has created a serious problem for the export industries which have to maintain their costs of production on the competitive level.

The second problem in the financial field resulted from the inevitable effects of inflation which the government had to resort to for the purpose of meeting the expenses of a costly war. The government virtually left the gold standard during the war, stimulated the issue of paper money and the increase of bank deposits. Prices rose, wages increased and the government was caught in a spiral of inflation. Other countries also experienced the same conditions as may be seen from the rise in the price levels in different countries. The rise in the wholesale prices between 1913 and 1919 was 136 p. c. in England, 227 p. c. in

- France, 315 p. c. in Germany, 108 p. c. in the U.S.A. and 250 p. c. in Italy. The depreciation of the pound sterling, however, was not fully apparent as the dollar-sterling rate was pegged for the duration of the war and internal prices were controlled by the government. When the peg was removed the cross rate fell to 3.18 in February 1920. Inflation could not be immediately checked. The price level continued to rise. The British Board of Trade wholesale index number rose from 229 (1913 = 100) in 1918 to 254 in 1919 and 315 in 1920. Consequently the cost of living index also rose. The exchange fluctuations and rising prices created a serious problem for the foreign trade of England.

It was in the interest of England to return to the gold standard in the absence of alternatives because of her extensive foreign trade and the dependence of the country on the supply of food from foreign countries. From 1922 the government resorted to deflation of currency. The price level dropped from 315 in 1920 to 161.9 in April 1925. The exchange also rose from \$3.20 in February 1920 to \$4.71 in April 1925. At this juncture a great controversy raged in England as to whether or not she should return to pre-war parity. Devaluation of the pound sterling was advocated because it would have lightened the burden of national debt, facilitated their payment to the U.S.A. and made adjustment of cost-price structure easy. Even on comparing the price levels in England and the U.S.A. the return to pre-war parity was not warranted. The immediate restoration of the gold standard would have led to its over-valuation by about 10 p. c. and serious effects on foreign trade. The government, however, hastily decided to restore the gold standard on the pre-war parity largely through its conservatism. The effects of this restoration on the export industries and foreign trade were, as expected, serious.

The foreign trade of England in the post-war period gave much cause for anxiety. In the immediate post-war years the boom in prices was reflected in the value of imports and exports. This is evident from the following figures :

Net Imports Net Exports
(£ millions)

1919	9626	963
1920	1932	1557
1921	1085	810
1922	1003	823
1923	1096	885
1924	1277	940
1925	1320	927

But these figures give a false picture of the trade position. If adjustment is made for the change in prices or value of money, the export trade shows a serious fall. After necessary adjustment is made and the adjusted figures are related to the level of import and export trade in 1913, the serious nature of England's foreign trade would be revealed. The index of adjusted figures would appear thus :

	Net Imports	Net Exports
1913	100	100
1919	90	55
1920	88	71
1921	74	50
1922	87	69
1923	95	75
1924	106	76

Even if the invisible exports were taken into consideration, the gap between the debits and credits of the country was widening. Its chief cause lay in the declining export trade. It is true that the position of other countries in these years was equally unsatisfactory. But it was no consolation to England. In the case of England fall in the export trade meant disaster while in the case of other countries it meant merely a check to their prosperity. In 1925 when the gold standard was restored, it was expected, at least in the government circles that the trade position of England would show improvement by the restoration of stable conditions in other countries which were supposed to take the lead given by England in the stabilisation of their financial position. As will be seen from the following figures of the credit balance of trade, these hopes were not realised before the crisis of 1931 :

Credit Balance in Favour of England.

	£ millions
1913	181
1925	54
1926	—7
1927	96
1928	137
1929	88
1930	33
1931	—145

This serious decline in the export trade was mainly due to three causes: 1) decline in the purchasing power of the people in many countries; (2) growth of local manufactures; and (3) displacement of English imports by goods from some other sources. As far as the first cause is concerned, it worked actively in the immediate post-war years when the countries which were directly or indirectly affected by the war were left in an impoverished condition. The second cause had more permanent results. Those countries which were unable to import many goods from outside during the war made an attempt to set up their industries. This was done not only by foreign countries but even by the dependencies of England. After the war was over these countries sheltered their industries by giving them privileges, concessions and subsidies, and by the introduction of tariff and a system of import licensing. Further some of these newly industrialised countries gave a serious competition to England and made many inroads into her former markets. One of the most serious competitors was Japan. England was unable to meet the competition because of the rigidity of her cost structure and the difficulties of rationalising her industries. The decline in her trade was also caused by the depression in agricultural countries which were among her chief markets and by the

change in the nature of demand. England's supremacy depended on her industries manufacturing producers' goods but in the post-war period an increasing proportion of consumers' income was spent on consumers' goods for the production of which the foreign countries like the United States of America and Japan were better suited. As a consequence of all these factors, England's share of world trade declined to 12.94 p. c. in 1924 and 10.76 p. c. in 1929.

As seen in a previous chapter, the effect of the decline of trade was very serious on the export industries. Among them the industries which were affected the most were the textile, iron and steel, coal and ship-building. Between 1913 and 1929 their exports declined by 37 p. c., 12 p. c., 18 p. c. and 19 p. c. respectively. Consequently their production was reduced and the number of workers employed in them declined. The percentage of the number of workers engaged in them to total workers which was 44 in 1907 declined to 25 in 1930. Consequently the percentage of the unemployed insured workers to total insured workers rose from 6.4 in 1921 to 12.2 in 1930.

An analysis of the causes of this industrial decline shows that there were five factors which were working adversely. They are the : (1) high manufacturing costs, (2) monetary policy of the government, (3) inferiority of organization and equipment, (4) attitude of the employers to urgent changes in management and organization and lastly (5) the attitude of labour. These five factors are not exclusive but overlap each other. To explain them briefly, it may be pointed out that though there was some improvement in efficiency during the war period, and though separatism and traditionalism of the old fashioned manufacturer were broken down, there was no fundamental change in the character of English industry. In matters of management, equipment

research and marketing the attitude of the manufacturers showed great indifference. The haste with which the government restored the gold standard and the subsequent deflation undertaken to maintain it affected industries very adversely. The position became very serious because of the obstructionist attitude taken up by labour with a strong trade union organization behind them. The position would become clear from the result of labour disputes in the immediate post-war period. Between 1906 and 1913 the total number of working days lost from labour disputes was 89.3 millions ; the same figure for the period 1919-1925 was 357 millions. Moreover after the gold standard was restored, between 1925 and 1930, while the wholesale and retail prices fell by 30 and 11 per cent. respectively, the wages fell by only 2 per cent.

One of the most serious problems which England had to face in the post-war period was the unemployment of workers. The matter became almost a grave national issue with the additional burden of finding work for those who were demobilised. Any attempt to find work for the unemployed was frustrated by the immobility of labour and the rigidity of wages. The unemployment insurance scheme, as said before, was put to its test and was found wanting. Its funds could not cope with expenses and by 1930 heavy debts were incurred by it.

In this state of affairs, it was necessary for the English industries to rationalise and combine. As pointed out previously attempts in this direction were made but without much success. The main obstacle in the way of carrying out these schemes was whether other countries would obstruct the revival of English export trade by raising tariffs. Though during and after the war many duties were imposed on imports into England, she was still a free-trade country. At the International Economic Conference, held in

Geneva in 1927, she took the lead to press on others the need for reducing tariffs. She had already paved the way for it by the Anglo-German commercial treaty of 1924 in which both the countries agreed to remove all prohibitions and restrictions on trade. As a result of discussions at the conference a convention was drawn up known as the Abolition of Import and Export Restrictions and Prohibitions Convention and was signed by Great Britain, U.S.A., Holland, Japan, Portugal, Sweden, and Denmark in 1927. But the spirit of the convention was not observed by the signatories and the tendency of European tariffs was to go upwards. On the level of tariffs prevailing in 1925, by 1929 there was an increase of 129 p. c. in Germany, 212 p. c. in Holland and 167 p. c. in Denmark. England, therefore, had no other course left but to revise her fiscal policy after the crisis of 1931.

In the post-war years a great progress was made in social services. The health insurance introduced in 1911 worked satisfactorily. Under the influence of the growing political pressure of labour, the unemployment benefits were extended. After the war housing was included in social services and Housing Acts were passed by which the government encouraged the house building activity by government grants, by loans by local or municipal authorities or by country enterprise. In 1918 the Ministry of Health was established to combine under one control the functions then scattered among many and often overlapping bodies. Recently there has been a great improvement in the conditions of health and the death rate has gone down.

The Crisis of 1931 and After

The economic deterioration of England in the post-war period reached its climax in 1931. After the Wall Street crisis of 1929 and the depression which set in thereafter, the financial position of the country became critical. Added to the adverse trade balance,

the withdrawal of funds from England was threatened. The gravity of the internal situation was told by the reports of the Unemployment Insurance Commission and the Macmillan Committee. In February, 1931, Mr. Snowden characterised the situation in these words : "I say, with all the seriousness I can command, that the national position is grave". The nervousness which was already prevailing was heightened by the May Report which suggested that unless serious economies in social expenditure were immediately undertaken the country would be heading towards bankruptcy. The industrial position in the three previous years also deteriorated causing grave disquiet. The following indices show that a crisis was imminent :—

	(1928=100)		
	1929	1930	1931
Industrial production	106	98	89
Employment	102	98	94
Net Exports-value	103	89	74
Wholesale prices	97	85	74

When thus the background was as it were ready for a crisis, the failure of an important Austrian bank started the economic collapse. Heavy withdrawal of gold by foreign countries made the maintenance of the gold standard difficult. On the issue of drastic economies in the expenditure on social services, in September, 1931, the Labour Government resigned and a National Government was formed. On the 21st September of the same year, England left the gold standard after great efforts were made to maintain it even by borrowing from outside. The country was consequently thrown in the grip of a great depression. In the general election held in October a National Government with a large Conservative majority was returned and it directed its attention to the measures necessary for recovery.

The first important step taken by this government dominated by Conservatives was, as already pointed out previously, to deliver the final blow to the crumbling edifice of free trade policy. By a number of emergency Acts protection was given to the industries of England. The idea of Imperial Preference was also accepted and an Imperial Economic Conference was held at Ottawa in 1932. Agreements were signed there between the Empire countries by exchange of concessions with the ultimate so-called ideal of Empire self-sufficiency.

The protection which England introduced in 1931 was used also for entering into a number of trade agreements. These were mostly with the countries of the sterling block, the Scandinavian countries, Argentina, and Egypt. It is not possible to mention all the detailed terms of these agreements, but broadly stated the principles underlying them were to give consideration to the home industries first, then to the Empire producers and finally to the foreign competitors in the English market. The other factors which had their influence on the nature of these agreements were : (1) the bargaining power of England, (2) the political and strategic importance of the bargaining country, (3) the interests of the different areas and industries in England which may be affected by them and finally, (4) the need for facilitating the payment of interest on the loans by England to many countries in the previous decades.

The monetary policy of the country also was directed with a view to regain the ground lost in the period after the stabilisation of the pound. The pound sterling was allowed to depreciate for a while with the result that the export industries received for a while an advantage in those countries which were on the gold standard. It was expected that this policy

would bring about an expansion of exports and a reduction in the unemployment. But this hope was not fulfilled, as soon after England left the gold standard other countries followed her example. Sweden, Norway, Denmark, Japan, U.S.A. and many other countries left the gold standard. By 1936 nearly the whole world had abandoned it. To avoid, therefore, serious fluctuation in the exchange value of the pound sterling, in 1932 it was decided to control exchange and for this purpose the Exchange Equalisation Fund was established. This lead of England was taken up by other countries like France, U.S.A. and Holland. In 1936 after France left the gold standard, a tripartite agreement was signed between France, England and U.S.A. with a view to permit the flow of gold between these countries on government account. Thus in the last decade currency has been managed very elaborately and the new technique has proved very useful to England in her efforts to improve her export trade and to adjust the balance of payments.

Simultaneously with these steps to improve her external position, England had to give attention to the improvement of her internal conditions. Agriculture was in a desperate position because of the competition of imported grain. The farmers demanded protection but it would have been an unpopular measure. Moreover when the government was elected it had given a pledge not to tax the people's food. The policy of the government, therefore, was to give relief to the farmers by introducing marketing schemes, subsidies, levies and where absolutely necessary, taxation. By the Agricultural Marketing Act of 1931 the Minister of Agriculture was given power to introduce marketing schemes for certain products if two-thirds of their producers gave assent to such schemes. If two-thirds of the producers agreed then the scheme would become obligatory and the marketing of the produce would be

looked after by a Marketing Board. In 1932, a second Agricultural Marketing Act was passed and power was given to the Board of Trade to restrict the import of those products to which marketing schemes were applied by means of quotas. In pursuance of this policy a number of marketing schemes for a variety of agricultural and dairy produce have been introduced. As far as wheat is concerned, by the Wheat Act of 1932 the home product was guaranteed a price of 45s. a quarter and the difference between the actual price and the guaranteed price was to be realised by a levy on all wheat flour. Farmers have taken advantage of this scheme and the wheat production in England has increased in the past few years. The government also subsidised the beet-sugar industry to encourage cultivation of sugar beet. The acreage under sugar beet increased from 386 in 1916 to 396,500 in 1934.

The agricultural policy adopted since 1931 was forced not only by the immediate difficulties of the farmers but by the ultimate object of making England, as far as possible, self-sufficient in regard to her food. Speaking about the new policy the Minister of Agriculture, Mr. Elliot, said : "The policy of quantitative regulation of supplies is not merely an expedient for meeting a crisis. It has come to stay. We may do ill or well, but we are sincerely tackling a very great problem. If fortune smiles on us, we shall have done something really great. If we fail, we have tried."

It has been already stated that the English industries suffered the most during the depression. In addition to giving them protection, the government encouraged and in some cases initiated reforms in organization and manufacturing processes. As a reference has been made to the government action in the case of staple industries, there is no need to discuss it here again.

During the depression, the number of the unemployed persons increased to a disquieting figure. The number of the registered unemployed persons in different years was as follows :

21 Dec.,	1931	2.5 millions.
19 Dec.,	1932	2.7 "
18 Dec.,	1933	2.2 "
17 Dec.,	1934	2.0 "
16 Dec.,	1935	1.8 "

The result of this large unemployment was that the Unemployment Insurance Scheme was put to a severe trial. Many adjustments in rates had to be made. Further because of a large number of the unemployed who might not be able to secure work as a result of the decline of industries and who might have exhausted their statutory benefits, transitional benefits had to be introduced. From 1934 however the position of the fund improved and normal benefits were resorted.* In 1936 again revised regulations were introduced by which the basic rates were fixed at : 16/- for a householder if a man ; 15/- if a women ; 24/- for a householder and his wife jointly ; 19/- for an adult member of the household ; 15/- for an adult boarder or lodger. In 1935 the rate of benefit for dependent children was fixed at 31/. Discretionary powers are given to the Labour Minister to reduce or increase the rates in those areas where exceptional rents or other circumstances prevail. A Means Test is applied to assess the unemployment assistance needed.

One of the most serious aspects of the unemployment in the post-war period has been the uneven distribution of the unemployed workers in the different areas. There were certain areas in which industries had permanently declined and the number of the

* See Chapter VII for details.

unemployed workers was very large. These areas were known as Distressed or Special Areas. The problem of the Special Areas became acute during the depression. There were three possibilities of solving their problem of unemployment : (1) to transfer the unemployed to other areas ; (2) to encourage new industries and (3) to revive the old industries. In 1934, a National Hunger March on London was organized by the unemployed. The government could no more ignore their conditions. In 1934, therefore, a Special Areas Act was passed. Commissioners were appointed to look after these areas and a fund of £2 millions was set aside to give help to the unemployed. In 1937, the commissioners were given power to remit rent, rates and income-tax to encourage manufacturers to start factories in the Special Areas. Between 1934 and 1937 some improvement was noticed in the condition of these areas. The number of the unemployed fell from 442,000 to 178,000. But it cannot be said that the problem of the Special Areas has been completely solved.

The foregoing paragraphs have made it clear that England was affected a great deal by the last depression. By 1936, however, a substantial measure of recovery was achieved largely due to a full-blooded banking policy. The cheap money policy accompanied by an open market policy had a tonic effect on business. The following indices will show the extent of recovery :

(1928 = 100)

	1932	1933	1934	1935	1936
Industrial production	88	94	105	112	121
Employment	94	97	100	104	108
Net Exports	50	51	55	59	61
Net Imports-value	61	58	63	65	73
Wholesale prices	72	72	75	76	80

General Profits Index

(Chain index—1929 = 100)

1932	65.2
1933	60.9
1934	68.2
1935	81.5
1936	98.8

The recovery from the depression noticeable from the above figures was a part of the general recovery in the world. Other industrial countries like Germany, Japan and the U.S.A. also experienced a substantial measure of recovery. From February 1933 to February 1936 the industrial production in these countries increased by 79.49 and 38 per cent. respectively. But the League of Nations Survey of Production and Prices (1936) pertinently pointed out that this recovery was not accompanied by a recovery in the international trade. In 1936 it was still 13½ per cent. below the level of 1929. In many quarters, therefore, anxiety was expressed as to whether the recovery would be lasting. In 1937, the course of commodity and security prices showed that the fear was well justified. There was a serious slump in prices and the Economist writing the 16th October, 1937 under the title "Slump or Recovery?" asked whether the next depression was waiting round the corner. It also pointed out that, according to the figures supplied by the Minister of Labour, the number of the unemployed was increasing. This recession was also experienced by other countries. It, however, did not continue for long. The political conditions in the world were deteriorating and before long a race for armaments started in the Continental countries. The situation was saved, at least temporarily. But the world might have to face a more serious depression when the war fever is over unless fundamental

changes take place in the structure of world economy. How the English economy will be affected by it, if at all it comes, the future alone will show.

Part II

The United States of America

Chapter X

THE PERIOD OF STRUGGLE FOR COMMERCIAL AND ECONOMIC INDEPENDENCE

The astounding economic progress of the United States of America started after the Civil War was over. In less than half a century after it, the country attained a position of leadership in the world in the production of agricultural and industrial goods, though older countries like England and France were in the field for a long period. In the following chapters an attempt would be made to study the extent of economic progress and its causes. This chapter, however, will be devoted to trace briefly the evolution of colonies in Northern America to the end of the Civil War.

America appeared on the map of the world after Columbus landed there in the last decade of the fifteenth century. European emigrants, mainly the English, Spanish, French and Dutch went there and made settlements. In 1607, the first settlement was established at James Town which became the nucleus of the present United States of America. Of the four important European countries which made such attempts at settlement, England alone was successful in maintaining the foothold. The English settlements were chiefly along the Atlantic seaboard. The result-

ing supremacy of England came to an end by the War of Independence.

As it should be the main occupation of the early settlers was agriculture. Land was available for the mere asking. In the North, the settlers cultivated small farms and produced food necessary for maintaining their families. In the South, however, large capital was applied to the production of tobacco, indigo and rice, and, therefore, agriculture was dominated by wealthy farmers. The difference between the Northern and Southern agriculture could be seen from the size of farms. While the average size of a farm in Virginia was 5000 acres, that of one in New England was only 100 acres. Down to the Revolution of 1775, there was little change either in the organization or methods of agriculture. The cotton cultivation in the South started after the country became free and the demand from England became continuous and large. The colonists had also started a few industries to satisfy their wants. Among them mention may be made of spinning and weaving, iron-smelting, shoe-making, ship-building, lumbering and others. Later on paper, glass and pottery industries were introduced. The Revolution gave an impetus to the growth of these industries, but after the war was over, they declined. The development of factory industry, however, started after the end of the eighteenth century.

The immigration of people from Europe and other countries, however, was very slow in the beginning. There was, therefore, a shortage of labour and to make it up indentured labour was imported into the country for varying periods and on varying terms. For the same reason slaves began to be brought to America from Africa and sold there. They were probably introduced into America by the Portuguese and the Spanish; later on other nationals entered this profit-

able business. These slaves were mostly bought by the planters in the South and by 1760 more than three-fourths of the slaves in the country were in the South.

The internal means of transport were poor and, therefore, trade was limited in scope and distance. Internally the navigable rivers and lakes were used for the movement of population and goods. With a long coast-line and the ease of oceanic transport, the foreign trade of the country was considerable. The chief exports were fish, lumber, furs, tobacco, rice, etc. The imports mainly consisted of woollen goods, iron, fruits, wines, etc. The bulk of the trade was with England.

The policy of England in regard to American commerce was a subject of great dispute between the two countries. When the settlements were made, they were granted complete freedom of trade. With the rise and advance of the Mercantilist doctrine in England, however, changes occurred in this policy. The first breach in the old policy was made in 1624 by James I who prohibited the export of American tobacco to any other country but England. But until 1651 the interventionist policy did not show any sign of obnoxious interference. The shipping ordinance of this year was the first of many measures later on introduced to regulate the commerce of America. The said measure provided that all products "of the growth, production, or manufacture of Asia, Africa, or America or of any part thereof... as well of the English plantations as others" could be imported into England or its dominions only in English built and English manned vessels. The word English above included her colonies. The manifest object of this measure was to encourage English shipping. As far as the colonies were concerned its effect was salutary because it led to the development of the ship-building industry in the colonies with the result that by 1775

nearly one-third of the English shipping was built in the colonies.

But this interference in the carrying trade, which then did not arouse great resentment, was later on extended to include commerce and markets. An Act of 1660 provided that the colonies shall reserve commodities not produced in England exclusively for her industries and merchants; from time to time the list of such commodities was extended to include unreserved commodities. Those commodities not reserved in this manner could be either sold to England or other foreign countries. Besides this restriction, excepting the corn law and other tariff duties, there were no impediments to American export trade to England. In 1663 an attempt was also made to regulate the import trade of the colonies. An Act of this year provided that the colonies could not import commodities from Europe unless they were shipped in England and were carried in English-built and English-manned ships. Thus both the measures were intended to obstruct the free movement of colonial trade and to encourage the importance of England in the international trade. Further, in 1733 prohibitive duties were imposed in America on the import of sugar, molasses and rum from foreign countries with a view to support the sugar industry in the British West Indies in which the English manufacturers had an interest. The trade between the different colonies also did not escape the attention of the English government and by an Act of 1673 such restrictions were placed on it that it would have to pass through England. Thus the colonial trade was put to a great deal of hardship by the commercial policy of the English.

When the English industries began to develop, more particularly after the Industrial Revolution, England wanted that her colonies should supply raw materials to and provide markets for them. In pur-

Enactment of this policy in 1699 the export of wool, yarn or woollen cloth from the colonies to any country was prohibited. This was done lest the growing woollen industry of England should meet with colonial competition. In order to apply the policy more thoroughly, in 1732 an inquiry was held in the colonial manufactures. Subsequently in 1750 the erection of any slitting or rolling mills, or plate, forge or steel furnaces was absolutely forbidden. This was no doubt prompted by the growth of an iron industry in England after the experiments of Derby succeeded in using pit-coal in the smelting of iron.

It may sound a little strange that the same government which restricted freedom of commerce gave bounties on the production of raw materials and semi-manufactured goods. In the eighteenth century, bounties were given on the production and their import into England was facilitated by admitting them free of duty or by charging low duties. The import of similar articles from foreign countries was penalised by prohibitions or heavy duties.

The obvious object of the foregoing restrictions was to keep perpetually the colonies as the producers of raw materials and as consumers of manufactured goods of the mother country. The restrictions were no doubt resented by the colonists but there was no open revolt against them because their enforcement was not strict and evasion was easy. A very large smuggling trade was carried on between America and England and her other colonies. Even the English officers in American ports connived at it.

After the Industrial Revolution started, the colonial policy began to be enforced more strictly. England also wanted that the Americans should bear the burden of expenditure on the establishment of internal order and the defence of the country from outside. After 1763, therefore, a new policy of in-

creasing taxation of the colonies was introduced. By the Sugar Act of 1764 duties on many articles of foreign import were raised or newly imposed and the importation of rum or spirits of foreign origin was prohibited. They were also forbidden to trade with the French West Indies. To add to the annoyance of the Americans, in 1765 a Stamp Act was passed to raise revenue for the army maintained there. It was strongly opposed and therefore, was repealed next year. But again an attempt was made to raise the necessary revenue by the raising of import duties under the Townshend Acts of 1767. They were also opposed and, therefore, excepting the duty on tea all other new imposts were abolished in 1769. The smouldering discontent of the colonies with the commercial policy of England burst into fury and they decided to boycott all trade with England. In the beginning the English government acquiesced to the demands of the colonists but afterwards the Parliament stiffened up its attitude and in 1775 troops were sent to America and she was forbidden to trade with any other country but England and the British West Indies. The result was a clash of aims of the two countries. America came out successful from this war in 1776. Thus American commerce was freed from the annoying English control. Trade was thrown open to foreign countries and for some time even many taxes on it were removed. A centralised government was established by the constitution of 1789. Thus a new period in the economic progress of America started after the War of Independence.

After the War of Independence

In the intervening period between the War of Independence and the Civil War the pace of industrial changes was quickened and the economic progress of the country became marked. To be more correct, the changes started after 1808 when the blockade of

Europe during the Napoleonic Wars affected adversely the trade of neutral countries. The war with England in 1812 increased the difficulties still further and the United States had to fall back upon its own resources to meet the wants which were formerly satisfied by imports from England. Bogart, therefore, remarks that "The year 1808 may be taken as a convenient line of demarcation to distinguish the period of dependence of the United States upon European countries from that of industrial self-sufficiency and diversified internal development". The industrial revolution, therefore, started in the United States in the beginning of the nineteenth century.

During the period under consideration, the population increased very rapidly. The first census taken in 1790 returned a population of 3.9 millions. It increased to 7.2 millions in 1810, 17.0 millions in 1840 and 31.4 millions in 1860. The population in new states decreased in these years but in the older states the rate of growth was less than the rate for the whole country because of the tendency of population to move from the East to the West. The urban population increased from 3.3 p. c. in 1790 to 4.9, 8.5, 16.1 per cent. in 1820, 1840 and 1860 respectively. In the same period the number of towns with a population of more than 8,000 people increased from 6 to 141. The population of the country as a whole increased less rapidly than the urban population the respective percentages of the two being 700 and 3758. The negro population did not increase at the same rate as the white population. Their respective percentages of increase in the fifty years before 1860 were 222 and 359. The proportion of the negroes living in the South to the total negro population remained steady about 92 p. c. As regards the number of immigrants, no reliable statistics were available before 1819. From this year until 1860, the total number of immigrants

was estimated at 5.06 million people. Compared to the population of the country this was certainly a large number. There were many causes, religious, political, social and economic, behind the immigration of these people into the United States. In America there was more religious freedom, more chances of rising from one class to the other, better opportunities of making a decent living and after being naturalised greater political freedom than in many countries of Europe from where they migrated to the United States.

After the War of Independence, the agricultural development was remarkably rapid. Among many factors, one which played a vital part was the land policy of the government. Between 1784 and 1820 the sale of the public lands was regulated by the motive of raising revenue and paying the public debt. After 1820 the policy was changed and was directed to the development of the country and land was sold or given away primarily for settlement or internal development. A number of Acts were passed in this period to give effect to these aims. With a view to raise revenue quickly, in 1785 an Act was passed by which the minimum size of land that could be sold to any individual was fixed at 640 acres. This had the effect of encouraging speculation by wealthy persons rather than settlement of small and honest farmers on land. In 1800, therefore, the minimum size was reduced to 160 acres and sales on credit were permitted at the rate of \$ 2 per acre. Even this scheme was used by speculators for personal profit. Those settlers, however, who had taken advantage of the facilities for payment provided by the Act were unable to pay the balances regularly and were in debt by 1820. In that year, therefore, they were allowed to keep that portion of land for which they had made payment and to return the remainder to the state. The price of land

also was reduced from \$2 to \$1.25 per acre provided cash payment was made. The minimum size for sale was reduced to 80 acres. The object of the changes of 1820 was to encourage settlers to purchase land and to settle on it. The average annual sales, therefore, for the next ten years amounted to 1 million acres.

After 1830, as the number of immigrants increased, transport facilities improved and prices of cotton and flour rose, the land values began to go up. Again speculation became rife. The annual sale of land increased from 3.8 million acres in 1833 to 20 million acres in 1836. In this period the speculative investment in land raised the question of the ownership of land. In many cases settlers had settled on unsurveyed land without permission from the government. The speculator tried to take advantage of the situation and bought the piece of land which was already cleared and the settlers could take no action. In 1840 as a temporary measure the government gave the right of preemption to the settlers by which they had the first right to buy the land cleared by them. The policy of protecting the interests of settlers was made permanent in 1841 by the Act passed in that year. Hereafter the sales for permanent settlement became more common and were at an average rate of $3\frac{1}{2}$ million acres every year with the exception of the panic year of 1857. Thus the land policy of the government was a great factor in the extension of agriculture in the United States. Besides this other factors responsible for the growth of agriculture were the vast amount of land and the ease of transfer enjoyed by its owners.

A general survey of agricultural organization and methods used in this period shows that there were certain points of difference between the agriculture in the North and the South. In the North farming was more diversified, methods were better, agricultural

education more widespread, the land more valuable and the labourer more intelligent than in the South. Unlike the landowners in the South who cultivated their lands with the help of slaves, the Northern farmers cultivated their lands themselves and hired free labour when necessary. In the South, of the four staples rice, sugar, tobacco and cotton, the cultivation of the last increased very rapidly in this period. Its production increased from 334,728 bales of 500 pounds each in 1820 to 1,377,640 bales in 1860. In the North and the North-West the production of wheat and corn increased in the same remarkable manner. There was also a noticeable improvement in the methods of agriculture. Agricultural societies were started for the demonstration of improved methods. Mechanical inventions were applied to do work which was formerly done by men. The value of such mechanical devices produced in 1860 was estimated at \$ 17.8 millions. With the increasing demand from Europe the export trade in agricultural commodities made rapid progress. Cotton alone accounted for fifty per cent. of the export trade before 1860. The following statistics show the expansion in agriculture and the export trade in grain :—

Principal Agricultural Products, * 1840-60

	1840	1850	1860
	(in millions)		
Improved farm land, acres	.	113.0	163.1
Corn, bushels	377.5	592.0	838.8
Wheat, bushels	84.8	100.4	173.1
Oats, bushels	123.0	146.5	172.6
Cotton, lbs.	600.0	960.0	2120.0
Tobacco, lbs.	219.1	119.7	434.2
Rice, lbs.	80.8	115.3	187.1

* Bogart: *An Economic History of the United States*, pp. 268 and 270.

Export of Grain, 1823-63.

Years	Value (In million dollars)	Percentage increase
1823-1833	67.8	..
1833-1843	73.3	8.0
1843-1853	198.5	170.9
1853-1863	512.3	158.0

The manufacturing industries emerged from the domestic into the factory stage in this period. The factors which were at work in bringing about this change were many. There is no doubt that the inventive and enterprising spirit of the Americans was largely responsible for the rapid establishment of industries. The number of patents taken out during this period shows how their minds were directed to inventions. The number of patents increased from 500 in 1840 to 4778 in 1860. Other factors which encouraged the enterprising spirit were the abundance of raw materials and mineral resources, freedom from oppressive taxation, lack of internal barriers permitting territorial division of labour, vast amounts of capital collected by a large number of banking institutions, distance from other manufacturing countries likely to compete and finally protection given by high tariff duties levied on the import of a number of articles by a series of Tariff Acts. The mineral industries which were developed in this period were iron, coal, copper, lead and gold. Besides these, industries were developed which used the raw materials of the country like cotton textile, food-stuff and lumbering industries. Consequently the value of manufactures increased from \$ 200 millions in 1810 to \$1886 millions in 1860. The industrial position of the United States of America on the eve of the Civil War is pictured in the following statistics. There were 140,433 industrial establishments and the average number of workers

engaged in them was 1,311. The per capita production for every man, woman and child was \$ 60. The distribution of industries, however, between the North and the South was uneven. The South had only about 15 p. c. of the total establishments, 8.5 p. c. of the total wage earners and a little over 8 p. c. of the total products.

A reference has been made above to the introduction of protective tariff as a factor in the industrial growth of the United States. The circumstances leading to its adoption and the extent to which it was used will be discussed in a later chapter. It will be sufficient to mention here that the first protective measure was introduced in 1816. Since then duties were raised to higher levels until the highest level for the period before the Civil War was reached in 1828. Thereafter though changes were made in the level of tariff, the character of tariff did not alter. On the question of tariff the South and the North held divergent opinions. The North wanted protection to develop its industries. The South which was not sufficiently industrialised had to import manufactures from outside and the prices which it had to pay for them were higher because of the import duties. For over three decades the relations of the two parts of the country were not very cordial largely because of the differences in opinion on this question.

As far the internal means of transport are concerned, after the establishment of the Union, a movement was started to improve them. From the political as well as the economic point of view such improvement was necessary. An attempt was, therefore, made to construct turnpikes in 1792 by private enterprise aided by grants from the states. This policy continued upto 1807 when the Federal government interested itself in the problem. But as later on its constitutional rights in this matter were questioned,

the Federal enterprise came to an end and the states once again revived the old policy. In spite of these efforts the condition of roads before the Civil War was not very good. Another kind of effort in improving the transport system was directed to the construction of canals. The lead was given by the state of New York and the first important canal, the Erie canal, joining the lake Erie with the Hudson river, was completed in 1823. The Ohio canal was completed in 1832. Thereafter a number of canals were completed connecting rivers and providing a net-work of internal waterways. Between 1831 and 1860 the government spent about \$ 12.3 millions on roads and canals and another \$ 124 millions on rivers and harbours. Even while the craze for canal construction was approaching its height, a beginning was made in the construction of railways. The first railway line was opened in 1826. Since then the growth was rapid. The mileage increased to 23 in 1830, 2,818 in 1840, 9,021 in 1850 and 30,626 in 1860. The mileage of the Southern states was a little less than one-fourth. During this period, with the increase in the demand from Europe for food and raw materials produced in the United States, and the general liberalisation of trade, the shipping tonnage of the United States engaged in foreign trade also expanded from 700,000 in 1800 to 1,000,000 in 1850 and 2,500,000 in 1860. Thus this period noticed a great improvement in the means of transport. This no doubt was a vital factor in the movement of population and goods, and therefore, in the general economic progress of the country. The very continental size of the country made good transport facilities the pre-requisite of progress.

The foreign trade of the country recorded a progress comparable to the internal improvement. In 1807 the value of imports and exports was estimated at \$ 138 millions and \$ 108 millions respectively.

Thereafter for some years there was a decline in it because of the blockade of Europe in the Napoleonic wars and also because of the dislocation which was caused by the war of the United States with England in 1812. In 1814, the imports and exports hardly amounted to \$13 millions and \$7 millions respectively. The trade remained steady between 1815 and 1835 except for 1816 when the imports were abnormally high. After 1835 the trade continued to grow until in 1860 the imports and exports were valued at \$353 millions and \$316 millions respectively. In the last mentioned year, on the export side, 77.54 per cent. of the exports went to Europe, 12 per cent. to North America, 5 per cent. to South America and less than 3 per cent. to Asia. As far as the composition of exports is concerned, manufactures accounted for 11 per cent. only and the remainder consisted of raw materials, food-stuffs and semi-manufactured goods. On the import side, 60 per cent. came from Europe, 20 per cent. from North America, 8 per cent. from South America and 9 per cent. from Asia. The proportion of manufactures and other goods was nearly equal. Thus the bulk of the foreign trade of the United States of America was with Europe. Manufactures did not play an important part in the exports of the country. Compared with the resources, the size of the trade was not very large. The real development of the foreign trade came after the Civil War.

The Westward Movement

While discussing the growth of population a reference was made to the Westward Movement. As it has played a very important part in the economic progress of the country, it needs an explanation. When foreigners came to America, most of them settled in the Eastern part bounded by the Alleghany mountains in the west and by the Atlantic in the east.

Little attempt was made to go beyond the mountains. As a matter of fact when the opportunities of migrating towards the west improved, the movement of the population to those regions was prohibited by a Royal Proclamation in 1763. In spite of this prohibition and the opposition of the Indians in the western regions, because of the possibilities of making an easy living from the abundant lands, the population began to move westward. When the conditions in the country became unsettled during the War of Independence, the people from the eastern regions began to move beyond the mountains. The conditions of transport were bad indeed, but the people used crude barges or rafts on rivers, Indian trails or crude cut roads, horses, mules and oxen as the means of transport. The number of people in this region increased from 200,000 in 1790 to 1,075,398 in 1810. The dislocation of trade in the following years resulted in difficulties of livelihood in the east and the movement of population became more pronounced. Since then the exodus was continuous with occasional setbacks in the years of prosperity. From decade to decade the frontier line was pushed further west until the whole region between the Atlantic and the Pacific was inhabited. The settlement of the western regions also led to the incorporation of more western states in the Union.

The manner of settlement was interesting. It proceeded in three waves of emigrants. The first wave consisted of pioneers. They cleared the land and depended on natural vegetation for the satisfaction of their wants. A second wave of emigrants came and purchased the lands cleared by the pioneers, built houses, roads and bridges. The pioneers who were thus freed moved on to the next unsettled regions. In their turn the second class of settlers was freed by the coming of men with capital who bought the improved areas and applied capital to building better

houses, roads, schools, etc., and for turning the former villages into prosperous towns or cities. The second class of settlers moved further on. Thus the spirit of pioneering had taken hold of the minds of the people and the frontier line receded before their march.

The significance of this Westward Movement of population lies in its economic effects on the country. It made possible the opening of a vast continental country and its inhabitation. In the beginning as the means of transport were bad, the settlers tried to be self-sufficient. They established some handi-crafts to satisfy their wants. But when the internal water transport developed in the beginning of the nineteenth century, they concentrated on the production of food-grains and supplying them to other parts. In the meanwhile, the South was concentrating on the production of cotton and other staples of commerce and was in need of food. It was supplied by the western regions. The western regions which had little industrial development were in need of manufactured goods. They were supplied by the development of industries in the east. Thus the Westward Movement made possible a territorial division of labour by encouraging agriculture in the South and industries in the East. The trade which resulted from it, however, was one-sided. The West sold to the South but did not buy anything from it; the East sold to the West but did not buy anything from it; the South exported three-fourths of its production to foreign countries. Though the trade was one-sided one, it brought about a great expansion of internal trade.

The Civil War And Its Effects

The Civil war (1861-65) was at bottom a clash of economic interests. In the previous century the two parts, the North and the South, had progressed along divergent lines. Firstly, as said before, they held different views on the question of slavery. In the

South agriculture was developed on capitalist lines and plantations were set up to produce for the overseas markets with the help of slave labour. The chief crop grown was cotton. It imported its food-stuffs and manufactures from outside. The North on the other hand had developed a different type of agriculture. Climate was not suitable for the tropical or semi-tropical products. Settlers in this part had not enough capital to buy slave labour and even if they could slave labour could not thrive in the cold climate of the North. The typical holding, therefore, was a homestead which could be cultivated by a family. It was producing its food-stuffs and manufactures and was self-sufficient. Thus there were as it were two different civilisations in the North and the South. Secondly, they differed on the question of tariff. As the North desired to develop its industries, from the beginning of the nineteenth century, under the influence of manufacturers, it adopted a high protectionist policy. The South was in favour of free trade as if it supported protection it would have been required to pay higher prices for imports. Thirdly, it detested the growing hegemony of the North. The South, therefore, wanted to maintain its civilisation at any cost. In 1860 when Lincoln who favoured abolition of slavery was elected the President, the South saw that its civilisation was in danger if slavery was abolished. Soon after the election, therefore, South Carolina left the Union and her example was followed by other states. Thus eleven states left the Union. The North wanted to force them back into the Union. Civil war broke out between the North and the South. The North came out successful from this struggle and the Southern states had to go back into the Union.

The economic effects of the Civil War were far-reaching. As far as the South is concerned the slaves

were freed, the large plantations were broken up and for some time, in the absence of adequate labour, small farms were established. For the same reason, machinery was applied to agricultural production. In addition to cotton, food-stuffs began to be produced. But with the spread of the Industrial Revolution in Europe, the demand for cotton expanded and the cotton crop once again became the chief staple. Further during the war the South did not receive its usual supply of manufactured goods and, therefore, household industries and small factories were started.

The effects on the North were equally salutary. Agriculture received an impetus from poor harvests abroad, increased domestic demand for foodstuffs and the rising demand for raw materials from the growing industries. The land policy of the government also encouraged further expansion of agricultural area. Industrial development was also quickened. Those industries which were working for the war received an encouragement and, therefore, expanded. Many new industries were started. During the war the expansion of currency to the point of inflation raised the prices of agricultural and industrial goods and acted as an additional stimulating factor.

The war also showed the need for improvement of transport means. In particular a railway system connecting the east with the west was felt to be necessary from the political and economic points of view and, therefore, government gave all facilities to the development of railways. Roads and waterways also were extended.

Another remarkable achievement of the war was the development of a sound banking organization. Before the war, there was a multiplicity of unregulated currency issues. It had become a cause of recurring financial crises which gave a setback to the progress of the country. In 1863, therefore, a law

establishing a national banking system was passed and detailed provisions were made regarding the regulation of the business of national banks. Though there were still many defects in the banking system of the United States, for example the absence of a central bank to regulate credit according to the needs of business, the conditions necessary for creating confidence in banks were established and the collection of the savings of the people was facilitated. Without a well organized banking system, the future development of large scale industries would have been arrested.

Finally, the victory of the North decided once for all the controversy regarding the tariff policy. There was no place for half measures now. The United States adopted an unbridled policy of protection. During the War existing duties were raised and new ones imposed. The level of tariffs was higher than in any previous years. This was justified on the grounds of war finance. But even after the war was over, the level of tariff remained substantially the same. In fact, later on it had a tendency to go upwards. The effect of this policy was very encouraging to industries and behind the tariff wall they made an astounding progress.

Chapter XI

THE GROWTH OF POPULATION AND AGRICULTURE

The growth of population of the United States was slowed down by the effects of the Civil War on her young population. Directly or indirectly about a million people were killed. Most of them were young persons. The birth rate, therefore, declined from 35 per thousand per decade before the Civil War to 26.6,

26.0, 24.9 and 20.7 for the decades ending in 1870, 1880, 1890 and 1900 respectively. In the twentieth century with the change in the attitude of people regarding the size of family, with growing independence of women, with the rising cost of living and the difficulties of getting free land in the west as before, the rate of growth continued to be slow. It declined to 21.0 and 14.9 for the decades ending in 1910 and 1920. Over the whole period (1860-1930) the population increased from 31.4 millions to 130.0 millions. The birth rate for the period 1931-35 was 16.5. The rate of increase in the different states was fluctuating. In the past the rate of growth of the negro population also slowed down from 21.4 for the decade ending in 1870 to 6.5 for the decade ending in 1920. The total negro population increased from 4.4 millions in 1860 to 10.4 millions in 1920. The number of the immigrants continued to grow until the end of the century but thereafter, because of the restrictions placed on them and the difficulties of securing employment, it declined. Between 1860 and 1900 the total number of immigrants was 14.2 millions. This was no doubt the result of the expansion of agriculture and industry. In the twentieth century, the number of immigrants was fluctuating from year to year. The highest numbers for the period were in 1907 and in 1914. In these years the number of immigrants was 1.2 millions. The number of immigrants for the whole period from 1820 to 1924 was 36 millions. The decline in the numbers in the twentieth century was no doubt the result, among other causes, of the restrictive legislation of the period.

The attitude of the government to immigration has changed from time to time. In the beginning the Congress encouraged immigration. In 1860 a law was passed by which employment of labourers under contract was permitted and their wages were allowed

to be pledged in advance to pay for their passage. By the Burlingame treaty of 1868, the Chinese were permitted to enter the country and were allowed to "enjoy the same privileges, immunities and exemptions in respect of travel or residence as may be enjoyed by the citizens or subjects of the most favoured nations". However, in 1882 the Chinese immigration was restricted for the next ten years and in less than two years' time after this was completely prohibited.

In 1882, however, a beginning was made in the enactment of general restrictive legislation. By a law of that year, a head tax of 50 cents was imposed on all aliens landing in the United States. Certain classes of immigrants like lunatics, idiots, etc., were completely prohibited. In 1885 the immigration of contract labour was prohibited. The law of 1891 extended the list of excluded classes, declared promises of employment through advertisement in foreign countries illegal, prohibited steamship companies from soliciting or encouraging immigration and allowed the exportation of any alien within one year after his arrival at the expense of the steamship company if he had been brought in violation of law. The head tax was doubled in 1894. It was also thought that an educational test should be imposed for the immigrants but the proposal was vetoed by Cleveland in 1897 as being against the policy of the United States.

The heavy immigration of low-grade labour in the years 1860-1900 led to an agitation on the part of organized labour demanding stricter restrictions. Their contention was that the immigrant labour worked on low wages and lived a poorer life. The Act of 1907, as amended in 1910, therefore, extended the excluded classes, increased the head tax to \$4 and provided for the enforcement of law.

The Immigration Commission created in 1907 made a thorough study of the problem of immigration

and made recommendations on its many aspects. In 1907 and 1914 again attempts were made to impose an educational test but in both the years they were turned down by the President. But in 1917 the Congress passed a measure imposing a literacy test in spite of the veto of the President. In the same year the head tax was increased to \$8. The literacy provision declared that aliens above the age of 16 years who could not read the English language or other language or dialect including Hebrew or Yiddish should be excluded from immigration. Certain exceptions, however, were provided. A more stringent legislation was soon enacted in 1921 which limited the number of immigrants of any nationality admitted in any year to 3 per cent. of the number of such nationality then resident in the United States. Consequently the annual immigration quota was fixed at 355,825. The United Kingdom, Germany, Italy and Russia had leading quotas with immigration permission for 77206, 68039, 42021 and 34247 people respectively. In 1924 an attempt was made to restrict the numbers still further. Accordingly the annual immigration was restricted to 161,000 until 1927 and thereafter to 150,000. One feature of this measure, aimed at the Japanese, excluded all immigrants ineligible for citizenship. The sentiments which actuated this legislation were born of the post-war conditions. It was feared that after the war, the flood of immigrants from Europe would increase to escape heavy taxation. Immigration on such a scale would affect the wages of workers in the United States. In fact demand for such a legislation was very insistent on the part of organized labour. And further there were about 10 million unnaturalized immigrants in the country who had already settled down. Unless the rights of citizenship were conferred on them, it was felt that further immigration was not desirable. The sentiments behind the recent

legislation were expressed in the annual message of President Coolidge in 1923 in the following words : "New arrivals should be limited to our capacity to absorb them into the ranks of good citizenship."

Growth of Agriculture

The impetus given to agriculture by the Civil War, the growth of population and the increasing demand for food-stuffs and raw materials from foreign countries, particularly Europe, brought about a marvellous progress in agricultural production. Its prosperity continued unabated till the last Great War after the end of which, for reasons which will be discussed later on, the farmers in the United States passed through difficult times. Statistics regarding agricultural production were not reliable before 1870. A rough estimate of the value of agricultural production on the eve of the Civil War would place the figure about \$ 1000,000,000. It increased between 1870 and 1910, from \$1958,000,000 to \$ 8,498,000,000. During the war period, because of the high prices prevailing, the value rose to the high water mark level in 1919 when the total production was valued at \$ 17,677,000,000. In the post-war period, however, because of the falling prices and subsequent depression the total value declined to \$ 11,923,000,000 in 1929.

The area of land under cultivation continued to grow so long as more land could be brought under tillage. In 1850 the total area under cultivation was estimated at 293,500,000 acres ; it increased to 878,798,000 acres in 1910. Of this area in 1910, roughly 478,000,000 acres were improved and 400,000,000 acres unimproved. The number of persons engaged in agriculture increased to nearly 12.6 millions in the same period. Similarly all farm property increased from \$ 7,980,000,000 in 1860 to \$ 78,000,000,000 in 1910. After the revolutionary changes in the oceanic trans-

port in the second half of the nineteenth century, the value of exports of agricultural goods increased from decade to decade. In 1870, the value of such exports was estimated at \$ 361,000,000 ; in 1900, it had reached \$ 836,000,000. In that year the export of agricultural goods bore a proportion of 62 per cent. to the total exports. Thereafter the exports of manufactured goods continued to grow and the proportion of the former dropped to 53 per cent. in 1920.

The organization and methods of agriculture have showed a remarkable progress since the Civil War. The average size of the farm has remained substantially high though in some regions as in the South for some time after the Civil War it showed a decline. After the war, the average size declined from 199.2 acres to 146.2 acres in 1900 ; in 1910 it was 138.1 acres and thereafter it improved to 140.2 acres in 1920. The average large size of the farm has made its mechanisation possible. Agriculture has been organized on the principles of division of labour analogous to similar specialisation in industry. After 1900 farming became more and more a machine industry making use of not only labour saving devices but also of power devices. Use of tractors and elevators has become common. The growing use of machinery could be judged from the increase in the value of all farm machinery from \$ 250,000,000 in 1860 to \$ 750,000,000 in 1900. Another remarkable feature of the organization is that because of the vast cultivable lands lying in different regions, specialisation in production has been introduced according to regions which are suited to the production of particular crops. This tendency was helped by the immense development of transport facilities. Thus to mention a few examples, the South has developed cotton cultivation, Minnesota and Dakotas spring wheat, and California and Florida fruits. Further in contrast with the general structure of world agricul-

ture, an attempt is being made in the United States since 1925 to convert agriculture into a large scale corporate enterprise. It aims at using all the devices used by corporations, such as the raising of capital by means of shares sold widely and managing the farms on the line and staff method with a number of specialised officers supervising the work and the farmer playing the role of a mere day labourer. This tendency has been deprecated as a dangerous innovation likely to affect farming as the last stronghold of the individual owner. Kansas has already passed a law against it and it may be expected that other states also will take similar action.

Causes of the Growth of Agriculture

It is not possible to point out any one single cause as responsible for the striking growth of agriculture since the Civil War. The present position is the result of the working of a number of factors. It is no doubt true that the present size of the agricultural industry owes a great deal to the abundance of land and the policy of the government in giving it away to settlers on easy terms. A reference to the land policy in the previous period has been made in the last chapter. In this period the government passed a number of laws to permit the poorer people to settle and finally own the land cultivated by them. By the Homestead Act of 1862, land measuring 160 acres was given free to actual settlers. They got title to the land after five years of actual settlement or cultivation. Any citizen of the United States or those who had declared their intention to become such were eligible for grant under this Act. This privilege was extended to sailors and soldiers by the Soldiers, and Sailors' Homestead Act of 1872 which provided that military service may be counted as a part of the five year period. But at least one year's residence and cultivation were necessary. In order to encourage

irrigation and inhabitation of waste lands, by the Desert Land Act of 1877, 640 acres of land were given to settlers who agreed to provide water for their tracts within three years. As a result of these Acts an extensive area was occupied and actually brought under cultivation. The public Land Commission speaking about the Homestead Act said: "It protects the government, it fills the states with homes, it builds up communities and lessens the chances of social and civil disorder by giving ownership of the soil, in small tracts, to the occupants thereof. It was copied from no other nation's system. It was originally and distinctly American and remains monument to its originators."

In the twentieth century the policy outlined above was continued. By the Homestead Act of 1912 the right to 160 acres of land was given to any citizen or applicant for citizenship who would actually settle on land and cultivate. The title passed to him after three years. The Enlarged Homestead Act of 1909 allowed 320 acres of certain kinds of land to be given to settlers in certain parts of Nebraska; the minimum size of land was extended to 640 acres by the Kinkaid Act. In 1916 the land policy was extended to include grazing lands. By the Grazing Homestead Act of this year 640 acres of land could be given for grazing purposes. In addition to these provisions the state has allowed larger tracts to be taken by industries under lease terms. As a result of this policy, in the twentieth century, land was taken up at the rate of 1,000,000 acres a month. By 1923 the total value of land sales since the state undertook such sales amounted to \$ 491,300,484. Thus the abundance of land and the policy of the state to give it on easy terms has played a vital part in the growth of agriculture in the United States. But this growth would have been slow if other factors which are essential to the expansion of

agriculture were not provided to farmers.

The work of the Federal and State governments did not stop at the sale of land only. After 1860, they closely followed the agricultural progress and provided aid and guidance in the following forms: (1) grants of land and funds for agricultural colleges and schools and experimental stations; (2) establishment of credit institutions specially designed for help to farmers; (3) provision of irrigation; (4) direct personal advice; and in recent years, (5) control over agriculture and improvement of the position of farmers.

The importance of agricultural education in the improvement of land and production requires no emphasis. Equally research is vital to the progress of agriculture. Before 1860 the states had devoted a considerable attention to education, but the first organized large scale effort was made in 1862 by the National Agricultural Colleges Act. Under this Act the states were to be given 30,000 acres of land from public domain and the proceeds of their sale were to be kept in trust; at least one college was to be established in each state; and the states were to bear the expenses of location and management of the institution; it had to be started within five years of the acceptance of the offer. In 1914 there were 69 colleges started under the provisions of the Act. Similarly grants were made to states for the support of agricultural schools under the Smith-Lever Extension Act of 1914 and the Smith-Huges Act of 1917. By 1923, there were 200,000 students taking education in agricultural colleges and schools.

As regards agricultural experiment stations, the states had made an attempt to start them before 1887. In that year there were about 20 such stations. Then the Federal government decided to give aid to the extension of such stations by passing the Hatch Act,

of 1887. Since then the number of stations increased and in 1914 there were 60 experiment stations carrying on research. In most cases these stations were attached to the agricultural colleges and schools. Agricultural education and research have helped the American farmers to introduce up-to-date inventions in chemistry and machinery in the improvement of agriculture and to enhance their competitive ability in the world markets.

Besides these activities, the government established a number of specialised bodies like the Bureaus of Plant Industry, Forestry, Weather, Entomology, Animal Husbandry and Chemistry which have devoted their efforts to the improvement of agriculture.

Provision of credit to farmers is one of the most important services in the progress of agriculture. Generally commercial banks are reluctant to advance money to farmers because they require it for longer periods than the rules of safety for banking business permit. The usual period is six months but if prices are low, the period may be longer. Moreover, agricultural loans are not as liquid as required by commercial banks. The American farmers, therefore, had to borrow money from private agencies at very high rates. Sometimes the lender decided the crop to be sown and also required that the crop should be sold to him. As regards the price of goods sold, the farmer was at the mercy of the lender. The supply of credit, therefore, was defective but the state did not intervene for a long time because of the migratory nature of the population, the feeling of strong individualism pervading farmers and the lack of experience in co-operation. Some states had made an attempt to aid farmers by making provision for rural credit banks, but the first comprehensive legislation was the Federal Act of 1916.

The above Act introduced the Federal Farm Loan

Bank system. It consists of the Federal Farm Loan Board which administers the system, the Federal Land Banks which conduct the lending business and the Farm Loan Associations which are groups of borrowers. For the proper working of the system, the country is divided into 12 districts. In each district one bank has been established. The banks obtain their funds mainly by the sale of bonds secured by farm mortgages turned over to them by the farm associations in return for cash. The purposes for which loans are given are the purchase of land, equipment, fertilizers, livestock, farm buildings and the repayment of indebtedness. Repayment of loans is provided by suitable instalments. By 1925, the amount of loans advanced in the above manner amounted to \$ 1,535,198.933. Since then the amount has remained stationary because of the depressed state of agriculture. The Federal Farm Loan system is based on the principles of co-operation. The Act of 1916 also made provision for the establishment of Joint Stock Land Banks. There were 48 such banks in 1930. They had also advanced considerable amounts of money to farmers.

The Federal Farm Loan Banks usually advanced money for long term requirements. There was therefore no machinery providing short term and intermediate credit to farmers. Its absence was keenly felt during the depression of 1920. The Lenroot bill which was incorporated in the Agricultural Act of 1923 made provision for 12 Intermediate Credit Banks as adjuncts to the then existing Federal Farm Loan Banks. Originally the object of these banks was to work as "bankers' banks" and to lend to approved agencies which were in their turn advancing money to agriculturists. Thus the banks were not allowed to lend to individuals but may lend to banks or credit or marketing agencies. They were authorised to issue deben-

tures on the basis of paper which came in their possession. The loans were made for durations varying from 6 months to three years. In 1930 they were also allowed to lend for a duration of less than six months and even directly to "eligible financial organizations." The total debentures issued by these banks amounted to \$ 163,000,000 in 1930. By another part of the Agricultural Act of 1923, National Agricultural Credit Associations were permitted to be organized under the supervision of the Controller of Currency. They are similar to the Intermediate Banks except that their loans are restricted to a period of nine months, unless they are made for livestock requirements when the period may be three years. If their capital is under \$ 1,000,000, they are allowed to deal with the public directly: otherwise they act as merely rediscounting associations.

In addition to the above mentioned agencies, financial aid in the export of agricultural commodities were provided by the War Finance Corporation. It advanced money to American exporters and American banks engaged in the work of facilitating the export of commodities. These advances were permitted until February 29, 1924.

Adequate irrigation facilities can help to bring more agricultural land under cultivation. There were vast tracts of land in the west which could be cultivated if irrigation was provided. In 1870 there were hardly 20,000 acres of land under irrigation. In 1877, therefore, the Desert Land Act already mentioned was passed to encourage settlers to provide water for their tracts within three years. It failed to achieve anything substantial. Hence in 1894 the Carey Act made an attempt to interest private enterprise in irrigation. A considerable amount of irrigation work was done under this Act. But finally to speed up irrigation works the responsibility for initiating them

was placed on the shoulders of the Federal government. Since then a number of major irrigation works have been constructed by it. In 1930 the total irrigated area was about 23,000,000 acres and the value of crops produced from them in 1931 was \$ 70,000,000.

Marshy lands which would lie waste unless an effort is made to reclaim them for cultivation received special attention of the state governments. It was realised that the problem of draining these lands was complicated. Drainage of the land of one owner cannot be accomplished without construction of works through the fields belonging to others. Schemes of drainage also were beyond the financial ability of a single individual. Such schemes, therefore, required the co-operation of many persons. Nearly every state, therefore, passed a law making provision for the organization of drainage schemes. A number of drainage schemes, were, therefore, organized with the help of the states. By 1920 the total capital invested in drainage schemes amounted to \$ 372,200,000. The total land reclaimed was about 53 million acres or 5.5 per cent. of all farm land or 10.5 of all improved land.

Measures for the Stabilisation of Agriculture

During the post-war period the American farmers had to pass through distressing conditions. There were a number of causes responsible for the depressed state of agriculture. These causes were : (1) the agricultural prices collapsed as soon as government control was removed. During the war production was expanded to meet the demand from the European countries. But with the return of conditions to normal in Europe after war their demand declined. The rise of economic nationalism also had led to the imposition of tariff duties on the imports from other countries. In America the farmers found it difficult to adjust their acreage to the fluctuating demand ; (2)

with the fall in prices land values began to fall; as a result many banks and firms which had lent money to farmers were placed in difficulties. Any pressure from them for the recovery of loans was bound to bring distress to farmers. In 1914 the total of such loans was estimated at $1\frac{1}{2}$ billion dollars; the same figure had risen to 5 billion dollars in 1920. It declined to 2 billion dollars in 1930 and clearly indicated the hardships to which the farmers must have been put. When thus agriculture was already passing through difficult times, the depression of 1929 hit it still further. It was almost faced with a disaster. The prices of agricultural commodities declined by 60 per cent. Between 1929 and 1931, the annual average net return to a farmer after paying the expenses of production, interest, rent and taxes declined from \$ 847 to \$ 342. The volume of indebtedness also increased. Nearly 40 per cent. of all farms were mortgaged and the total value of farm mortgage debt was estimated at \$ 8,500 millions in 1933. The farmers in the United States were, therefore, faced with a hopeless situation.

After the situation had become intolerable in the early post-war years an attempt was made to pass relief laws by the Congress. In 1925 and 1927 two measures known as the McNary-Hangen bills were passed by the Congress but they were vetoed by President Coolidge on the plea that prices could not be stabilised by government authority in the face of economic laws. But the conditions of agriculture continued to deteriorate and the demand for relief became insistent. Finally, the government yielded and in 1929 the Agricultural Marketing Act was passed. It created a Federal Farm Board of eight members, established Commodity Advisory Committees in respect of each of the great staples of agriculture, and set apart a revolving fund of \$ 500,000,000 chiefly for

making advances to stabilising organizations. They were to act as marketing agencies with power to buy or lease storage capacity and to deal in certain agricultural commodities. Two stabilisation operations were carried out for cotton and three for wheat. As a result of this nearly 203 million bushels of wheat, and one million bales of cotton came under the control of the Board. In spite of these operations prices of these commodities continued to fall. The Board, therefore, since 1931 restricted its activities to the encouragement of co-operation and to the giving of advice to farmers. But the United States was passing through the critical years of depression, and inactivity on the part of the government would have meant prostration of American agriculture.

When President Roosevelt came to power on the 4th March, 1933, the agricultural situation was as critical as the industrial. The prices of agricultural goods were disproportionately lower than the prices of other products. The purchasing power of nearly half the population depended on the prices of farm products. Hence no industrial measure could have succeeded unless the agricultural position was improved. He, therefore, immediately introduced a number of measures to tackle the situation facing the farmers. It should, however, be pointed out that these measures, are a part of the general policy which has come to be known as the New Deal. In judging their effects, therefore, his other policies also should be borne in mind.

The most important measure passed by the Congress, was the Agricultural Adjustment Act of 1933. It aimed at raising the purchasing power of the agriculturists. The level aimed at was the purchasing power of the period August 1909 to July 1919. In the case of the basic (i. e., Corn, Wheat, Rice and Cotton) agricultural commodities a rise in prices was to be brought

about by a reduction of acreage or a reduction in production for the market or both. And the farmer was to be given benefits for such reductions. With regard to non-basic commodities, prices were to be raised by marketing agreements with processors, associations of producers and others engaged in the handling of these commodities in inter-state or foreign commerce. The expenditure for these schemes was to be found from processing taxes levied on the commodities as they underwent the first process after the farmer had sold them. It was hoped that the Roosevelt administration would be able to raise prices by these control measures supported by the other financial measures.

In addition, a number of measures were passed which aimed at giving specific type of help. Under the Farm Credit Act of 1933 provision was made for giving financial help through a large number of banks and financial institutions. The farmer was given relief from indebtedness under provisions of the Emergency Farm Mortgage Act of 1933. It authorised the Federal Land Banks to give cheap loans. Provision was also made to reduce excessive debts and to postpone the payment of principal. By the Home-owners' Loan Act of 1933 loans could be given to those whose houses were mortgaged. The main body to which the administration of these Acts was entrusted was the Agricultural Adjustment Administration.

In 1933 the cotton crop was reduced by voluntary agreement, but as many difficulties were experienced in the enforcement of this agreement, in 1934 compulsion was applied under the Bankhead Cotton Control Act. Restriction of tobacco acreage was also brought about by compulsion. In 1934 the wheat crop was reduced by 15 per cent. The restriction schemes raised the prices temporarily, though it must be noted that the policy of exchange depreciation and large purchases by the Surplus Relief Corporation of the

Federal government stimulated the effect.

It was also realised by the Roosevelt administration that mere restrictionist policies would not help to raise the prices permanently unless the exports of agricultural goods were increased. With this end in view, a special adviser to the President was appointed on questions of foreign trade and Export-Import Banks were established in Washington for the purpose of financing imports and exports. It was further realised that if America wanted to sell more to other countries, she must buy more from them. For this purpose the Tariff Act of 1930 was amended in 1934 and the President was authorised to conclude commercial treaties with other countries and also to reduce import duties by not more than fifty per cent. when it was found necessary to do so. Subsequently commercial agreements were signed with certain countries to which exports on a larger scale could be made.

In the second period of Roosevelt's presidency, in 1938 a new measure known as the Farm Act was passed to embody the principles enunciated in the Agricultural Adjustment Act which was declared invalid by the Supreme Court. The measure provides for the control of cotton, tobacco, rice, wheat and maize. A quota for the reduction of production would be applied to these commodities if two-thirds of their producers agreed to it. If there was no general agreement, any single individual farmer could agree to the quota scheme and take advantage of the provisions of the Act. If the quota scheme was accepted, the farmers would be paid the difference between the actual price in the market and a parity price fixed by the government for each commodity.

As far as the effects of the AAA policy are concerned, they were quite encouraging. In March 1933 the farm prices were 55 per cent. of the pre-war level. After the new policy was applied, the average of

prices for the whole year rose to 76 for 1933, 90 for 1934, and 108 for 1935. The total cash income of the farmers was also raised from \$ 4,328 millions in 1932 to an estimated figure of \$ 8,800 millions in 1935, an increase of 59 per cent. Approximately 8 per cent. of the income, however, was represented by 'benefit payments' made by the government for reduction of crop acreage. The debt of the farmers was also substantially reduced. Though credit for recovery may be given to the AAA, it cannot be forgotten that the monetary policies of the Roosevelt administration have played a more dynamic part. In fact some persons have attributed all the credit to them. Taking the whole period upto 1939 and analysing the trend of agriculture, one finds that recovery was more durable in the case of food products than the agricultural raw materials. This difference in the two was due to the fact that the demand for the latter was fluctuating with periods of progress and recession through which industrial production passed in these years. For example between 1937 and 1939 the index of production of consumption goods fluctuated. In 1937, the production had reached the level of 1929, but then next year it dropped by 20 per cent. and again rose by 17 per cent. in 1938 and again dropped by 8 per cent. in (May) 1939. Notwithstanding many drawbacks it must be stated that the intervention of the government was timely and the country was saved from a greater national disaster.

Chapter XII

INDUSTRIAL PROGRESS & TARIFF SYSTEM

The most striking feature of the period after the Civil War in the economic history of the United States is the astounding growth of industrial production. It was seen from the study of the years preceding the

Civil War that industries had been established in the Eastern states, particularly in New England, and that at the time of the war they were able to supply many articles required by the government. Demand for war purposes and the difficulty of importing goods from outside speeded up these industries and also led to the establishment of new ones. During the war, however, as thousands of workers were drawn into the army there was a shortage of man power and hence machines were invented to take the place of men. This in itself provided to be a great stimulating factor. The Civil War, therefore, became a turning point in the history of the United States. The pace of industrial production was quickened and she overtook many of the older countries in less than half a century. The remarkable success is reflected in the following figures of the value of manufactures of different countries at different periods.

Value of Manufactures			
	1820	1865	1894
	(In million dollars)		
United Kingdom	1,411	2,808	4,263
France	1,168	1,092	2,900
Germany	900	1,995	3,357
Austria	511	1,129	1,596
Europe (total)	5,644	11,479	17,352
U.S.A.	268	1,907	9,498

By the end of the nineteenth century, therefore, the leadership of the United States in industrial production was definitely established and has remained unchallenged even to this day. Even England with an earlier start could not keep pace with her. The United States overtook England in the production of pig iron and steel in 1890, in the output of coal in 1899 and in cotton goods in 1900. In the first decade of the twentieth century, industrial production in the

United States continued to grow because of the general development of the world and the growth of international trade. When the last war broke out, she was called upon to supply the needs of the Allies. After she joined their ranks in the fourth year of the war, home and foreign demand gave a tremendous impetus to industries and their production reached unprecedented figures. In the post-war years the industries enjoyed a prosperous period until 1929. Thereafter because of a severe depression, the industries suffered a setback. The progress of industrial production from 1859 to 1929 will be seen from the following figures for selected years :—

Industrial Progress, 1859-1929

	Number of establishments	Wage-earners	Capital millions.	Value of products in million dollars
1859	140,433	1.3	1,010	1,886
1899	355,405	4.2	6,525	9,372
1909	268,491	6.6	18,428	20,672
1919	214,000	8.9	44,466	62,418
1929	210,710	8.8	—	70,137

The causes of this rapid and vast growth of industrial production were many. To mention them briefly, they were : (1) The Civil War itself provided, as stated before, the initial causes for growth. The demand for food, clothing and iron in many forms encouraged respective industries. In addition the issue of greenbacks by the Federal government led to inflation and prices of all goods rose correspondingly. The Great War (1914-18) came as a further stimulating factor and production reached a record figure. (2) The adoption of a high protectionist policy by the government shut out all competition from outside and reserved the home market for domestic manufacturers. Behind the tariff wall old industries progres-

sed and new ones were started. (3) The abundant raw material and mineral resources supplied the basis for the growth of industries. This can be seen from the huge rise in the quantity of goods produced by many industries. The average production of iron ore increased from 51.6 million tons in the years 1870-80 to 588.8 million tons in the year 1921-30 ; between 1860 and 1929, the production of copper increased from 16.1 million pounds to 2002.8 million pounds ; the production of petroleum increased from 500 barrels in 1860 to 1005.5 million barrels in 1929 and lastly, the production of coal increased from 12.5 million tons in 1860 to 608.9 million tons in 1929. In addition to these resources indicated by production figures, the opening of the west with its grain production provided purchasing power to its inhabitants and created a huge demand for the production of the eastern industries.

(4) The improvement in the process of production was brought about by a number of inventions. They helped to reduce the cost of production and, therefore, low prices acted as a stimulus to increased consumption. The growth of scientific devices could be seen from the number of patents taken out in this period.

During 1880-90, on an average nearly 65 patents were taken out every day. Taking the whole period, the number of patents registered increased from 17,800 for the decade ending in 1870 to 423,000 for the decade ending in 1930. Many of these inventions were for the use of waste materials and, therefore, many industries developed subsidiary industries using the waste materials and turning them to some useful purpose. The development of by-products increased the profits of main industries and made them more prosperous.

(5) The growth of population has also acted as a vital factor in the industrial development. It provided the labour force necessary for the large scale industries and also expanded the home market. As

the population migrated to the different undeveloped areas, demand for those goods which are necessary for the improvement of such areas increased the market for the industries concerned with their production. The population of the country increased in this period from nearly 31 millions in 1860 to 130 millions in 1935.

(6) The development of industries was aided in two ways by the growth of transport means. They facilitated the distribution of goods and further as in the case of railways, created a demand for certain industrial goods. The iron and steel industry of the United States has been greatly helped by the construction of a net-work of railways. In this period, the railway mileage increased from nearly 30,000 miles to 240 000 miles. In addition, the great lakes, Erie, Ontario, Michigan and Superior, were connected with each other and used for internal transport. The canal system connected the navigable rivers and made them useful as arteries of commerce. A coastal steamship service made the distribution of goods in the coastal towns easy. Since 1920 the development of motor transport has further added to the available transport facilities.

(7) - The freedom of inter-state commerce permitted the movement of commodities freely unlike Germany where the customs barriers held up the progress of the country until the whole country was finally unified in the Empire in 1871.

(8) The growth of banking resources of the country after the National Banking system was inaugurated in 1864 and the Federal Reserve system in 1913 must be regarded as a vital factor in the development of modern large scale industries.

(9) Lastly, mention must be made of the proper localisation of industries as a factor responsible for industrial growth inasmuch as faulty localisation would have acted as an obstacle to the growth of industries to their full stature. Great attention has been paid to this factor as a result of which

industry is mainly located in the region north of Ohio and Potomac and east of the Mississipi.

Industrial Organization and Combination Movement

One of the important characteristics of the industrial development after the Civil War was the tendency of manufacturing establishments to increase in size. This tendency, however, became more pronounced after 1900. There are three aspects of this movement towards large scale production : (1) the form of organization ; (2) the size of business unit ; and (3) the consolidation of separate enterprises under one direction. All these three aspects finally led to the development of what is popularly known as 'big business' and two problems faced the American people in all their seriousness, the corporation problem and the trust problem.

Among the various forms of business organization the corporation form became popular in the United States for a variety of reasons. The resources of the country were immense ; the railways had opened vast markets ; the manufacturing industries had to cater to the needs of consumers whom they did not know ; the competition between them was growing and hence their risks were increasing. The business entrepreneurs, therefore, thought that the raising of huge amount of capital necessary for the development of resources and the distribution of incidental risks among many people could be achieved by the corporation form of organization. With regard to the advantages of this form of organization to the American people the Twelfth Census of the United States stated : "The facilities offered by the laws of several states for the establishment of business corporations and the advantages of conducting business under this method of organization are largely responsible for the rapid development of our manufacturing industries. The

corporate form of organization permits the gathering together of capital beyond the resources of the private individual, distributes it among many holders where this is desired, and limits the liability of each holder to the amount of money actually invested in the stock of the company. Thus these organizations comprise nearly all the great manufacturing enterprises of the country".* The position which the corporation form held in the industrial organization of the United States in 1919 will become clear from the following figures :—

Character of ownership.	No. of establishments	Percentage of workers employed to total.	Percentage of the value of goods produced to total
Individuals	138,112	4.0	6.2
Corporations	91,517	86.0	87.1
All others	60,476	10.0	6.7

The growth of the number of corporations and the devices used in their management have given rise to many evils. The stockholders who are generally scattered are unable to control the details of management and are satisfied if they are paid handsome dividends. For the same reasons the election of the boards of directors is in the hands of a few persons who hold proxies. It is not also uncommon to find the directors and promoters working jointly in their own interests rather than that of the corporations. Among other evils of management, mention may be made of speculative management, inadequate representation of minorities, scanty reports on the affairs of corporations, overcapitalisation and even fraudulent promotions. Accounts are also sometimes manipulated to conceal the true position of a corporation. This

* Jennings, A History of Economic Progress in the United States.

is done to escape the heavy corporation taxes. As far as the investor is concerned, he is unable to understand the true value of securities that are quoted on the market because of their multiplicity and the skilled devices used to sell them. The Wall Street crisis of 1929 showed how corporation evils can lead to a general financial and economic crisis and untold suffering of the people.

The second feature of the industrial development is the comparatively large size of manufacturing unit. It was brought into existence by a number of factors. Firstly, the corporation form of organization helped to raise a large capital which could be sunk in the establishment of a manufacturing plant with large productive capacity. Secondly, the revolution in the means of transport widened the home market and even permitted the capture of free foreign markets. Large scale production was, therefore, undertaken to satisfy large markets. Thirdly, internal competition forced many establishments to use devices for reducing costs of production. They had to use labour saving devices, minute division of labour and superior organization to overcome competition. But to make these measures paying, the unit of production had to be expanded. Lastly, large scale units had better opportunities of using by-products, of securing better control over final consumers and of having greater bargaining power with labour and transport companies. The tendency of business units to grow in size is brought out by the following statistics :—

Average Capital, Product and Wage-earners in

Industrial Establishments

	1860	1900	1920
Capital	\$ 7,190	\$19,269	\$153,293
Product	\$13,420	\$25,418	\$215,157
Wage-earners	9.3	10.4	31.0

Establishments Classified according to Capital (1925)

Capital	Percentage of establish- ments to total	Percentage of wage-earners to total.	Percentage of value of product to total.
5,000 to 20,000	29.8	1.9	1.0
20,000 to 100,000	36.8	2.9	5.1
100,000 to 500,000	22.5	20.0	15.3
500,000 to 1,000,000	5.2	13.5	11.0
1,000,000 and over	5.6	56.8	67.0

From the first table the general growth in the size of business unit is clearly manifest. From the second table, the importance of big units, though small in number, in the total output of industrial goods is brought out. The second table, however, does not show as to what must be the real size of units in the last capital group. All the same, the two tables taken together show the general tendency of business units to grow in size and the position they hold in the industrial organization.

The third feature of the organization of industries is the growing concentration of control by means of combination. The combination movement started as early as 1830 when the salt producers combined to restrict output. But the movement became more vigorous after the Civil War. The principal forms of combination which were popular at one time or the other are: (1) pools, (2) trusts, (3) holding companies, and (4) amalgamations and mergers.

Pools were popular during the period 1873 to 1887. They consisted of agreements between competing units either regarding prices or output, as in the case of railroads or coal mines, or division of markets or profits as in the case of the salt industry. For some time pools worked successfully, but gradually defects began to be noticed in their management. There was no punishment provided for the unit which broke the agreement and, therefore, there was a temptation to

a producer to throw it overboard because of the possibility of making higher profits when prices were high. Trusts were devised probably to make the combination more firm than a pool.

Trusts became popular between 1887 and 1897. The trust form of combination was introduced by John D. Rockefeller who formed the Standard Oil Company by agreements between 1879 and 1882. Since then trusts were formed in sugar, oil and tobacco industries. After these early experiments, the word trust became common in the economic terminology, but at different periods different meanings were attached to it. A 'legal trust' has been defined by Prof. Ripley "as an organization managed by board of trustees to whom all the capital stock of the constituent companies is irrevocably assigned; in other words the original shareholders accept the trustees' certificates in lieu of former evidences of ownership". Legal trusts were formed in the period under consideration. The twelfth Census of the United States had defined a trust as a mere combination of a number of formerly independent units. In later years, it came to mean any big business possessed of monopoly power. The trust movement was checked because of its evil results by the Sherman Anti-Trust Law of 1890 which made 'legal trusts' unlawful. Because of the depression of the years 1893 to 1897, the general combination movement also progressed slowly.

When the depression was over because of the difficulties of law in forming trusts a new form the holding company, was designed. A number of holding companies were formed between 1897 and 1904. The new form was merely another name for a trust. A holding company may be defined as a corporation which holds shares in other corporations, but does not itself conduct any business. The Federal Steel Company with a capital of \$ 100,000,000 and the Amalga-

mated Copper Company with a capital of \$ 75,000,000 were formed on this principle.

By the end of the nineteenth century, the combination movement had spread widely. About 2,160 combinations were formed and excepting 120 all were active. The industries in which they were formed were according to the order of importance iron and steel, chemicals and allied products, food and allied products, liquors and beverages, clay, glass and stone products.

In the beginning of the twentieth century, the fate of the holding company was in the balance as the decisions of courts about its validity were contradictory. In some cases they were permitted to exist, but in others they were ordered to be dissolved as being in restraint of trade within the meaning of the Sherman Law. Because of this legal uncertainty, after 1904 industrialists preferred to form outright mergers or consolidations. Upto 1920 combinations on this principle were formed between companies in similar lines or in related activities. Since then combinations have been formed even in unrelated lines. The progress of mergers in manufacturing and mining industries will be seen from the following figures for 1919-1928 :

	No. of mergers	No. of concerns merged
1919	89	292
1920	173	474
1921	89	373
1922	67	220
1923	67	218
1924	95	263
1925	121	333
1926	139	597
1927	207	678
1928	221	687

The combination movement owes its success to the diverse advantages which industrialists hoped to reap from them. In general many advantages were due to large scale production which resulted from bringing two or more units together. It is not necessary to go into all the benefits of large scale production but mention may be made of a few leading advantages which combinations expected to enjoy. They are as follows : (1) in depressions when industries have to work with reduced production, the best plant can be used to produce goods so that an equilibrium between costs and prices may be maintained ; (2) plants could be allocated for the production of particular lines of goods ; (3) up-to-date inventions can be used, by-products can be developed and saving on office and advertising expenses can be effected ; (4) by comparing the cost of production at various plants, improvements can be introduced in the less efficient plants ; (5) there would be better opportunities of control over capital, labour and materials ; and lastly (6) a good deal of saving could be made in freights by supplying markets from the nearest factories.

It must be admitted that combinations in the United States like cartels in Germany were successful in speeding up industrial production but frequently they were attended with abuses and hence they had aroused resentment against their practices, more particularly in the last two decades of the nineteenth century and the early years of the twentieth century. Among glaring abuses attributed to combinations mention should be made of unfair methods of competition to attain monopoly power by driving out competing units. Small manufacturing plants had little chance of surviving their attacks. The promotion of monopolistic combinations was also marked with frauds and political corruption. Moreover, labourers

and consumers were at their mercy. In the United States for various reasons to be discussed in a later chapter, trade unionism had not developed into a strong force until recent years and, therefore, in regard to wages and conditions of work, labourers had to look to their employers. When a monopoly was achieved in a certain industry, if the workers employed there were good for no other job, they had to accept wages and conditions of work offered by the employers. With a huge tariff wall obstructing the import of goods from outside, the consumers were also at the mercy of producers. They had to pay for goods produced at home prices charged by the manufacturers. Thus there was exploitation of labour and consumers by monopolistic combinations and, therefore, a demand was made by the people that government should either prohibit or control combinations.

In the beginning, some of the state governments responded by passing laws against trusts. But this attitude was not adopted by all the states and even as late as 1914 seven out of forty-eight states had neither laws nor constitutional provisions against trusts. The first Federal legislation was the Sherman Anti-Trust Law of 1890. It provided for dissolution of any combination operating in inter-state commerce which tried to restrain or monopolise trade. Thereafter a number of bills were introduced in the Congress to tighten up control but none of them succeeded excepting the addition of a few clauses to the Wilson Tariff Act of 1894 which declared illegal any combination in the importing trade when it had the object of hindering trade or competition or raising prices of the imported goods or the things made from them. Of the two, the Sherman Law was the most important. It merely provided for the dissolution of trusts but could not control the unfair practices used by big businesses to drive out small enterprises. Complaints were made

against such practices.

When the Democrats came to power in the election of 1912, they took up this question and two laws were passed in 1914. By the Trade Commission Act, a Federal Trade Commission consisting of five persons appointed by the President was created. The members were appointed in the first instance for a period of five years. The Act declared unfair methods of competition illegal and the task of preventing them was entrusted to the Commission. It was empowered to summon witnesses, call for papers, hear complaints from injured persons, direct companies to desist from using unfair practices and if necessary, even launch prosecutions. The second measure, the Clayton Act, provided penalties for the infringement of certain of its provisions. The chief provisions of the Act were: (1) it declared price discriminations illegal where the effect of such discriminations was likely to substantially reduce competition or tend to create a monopoly. Exclusive selling and leasing contracts when the tendency was to lessen competition or create a monopoly were also declared illegal; (2) acquisition of stock by one corporation in another or the combination of corporations where competition would be lessened, or commerce restrained, or a monopoly created or furthered, was forbidden; (3) as regards banks, it made unlawful for a person to serve as a director or as an officer of more than one bank chartered by the United States if the deposits, capital, surplus and undivided profits of any one bank exceeded \$5,000,000. A similar provision applies to private bankers and officers of the state banking institutions; and finally (4) interlocking directorates were prohibited in corporations where combinations were likely to be brought about by this device when corporations could not combine outright without violating law. Thus these two measures indicated the intention

of the government to tighten up its control over the monopolistic developments of the American industry.

In accordance with the provisions of the above laws, the courts ordered the dissolution of many concerns and in a number of cases imposed heavy fines on persons responsible for violation of the law. But very soon the attitude of the state became more liberal, particularly in the matter of combinations engaged in export trade. It was felt that the power of corporations engaged in foreign trade would be adversely affected in competing in foreign markets if they were not given sufficient latitude for fullest co-operation. Accordingly the Export Trade Act, more commonly known as the Webb-Pomerene Act of 1918 allowed organization of trusts in foreign trade. On the same principle, the Co-operative Marketing Act of 1922 permitted farmers, ranchers and growers to combine for the purpose of conducting efficiently the distribution of their products.

During the last great depression, when the Roosevelt administration proposed a number of measures for reviving industry, the restrictions contained in the anti-trust laws were removed or relaxed. Thus by section 5 of the NIRA it was provided that during the continuance of the NIRA and sixty days thereafter, any code, agreement, or licence approved, prescribed or issued and in effect under the Act, and any actions taken in compliance with their provisions, were exempt from the provisions of the anti-trust laws of the United States. The Roosevelt administration, therefore, has been accused of encouraging combinations. It justified them, however, as necessary in the immediate interests of the nation.

Though the state has made an attempt from time to time to curb the growth of monopolistic combinations, they have continued to exist in one form or another. This can be seen from the fact that in 1930

six companies controlled 75% of the steel capacity compared with only 58.9% in 1920 ; in mining 65 corporations received 84.6 per cent. of the net income of the industry in the six years, 1923-28 : and 3,933 electricity companies merged or were acquired by other companies during the same period. The above figures which could be easily multiplied, are enough to show that the United States are to this day the country of 'big business.'

The Tariff System

The tariff has played a very important part in the economic development of the United States. In the last chapter it was said that the question of tariff was one of the immediate causes of the Civil War. In the period after this war, it has been largely responsible for the swift industrialisation of the country and also for the rise of 'big business' and the attendant evils. Thus the study of the tariff history is very interesting. As the tariff policy after the Civil War was a heritage of the previous period, it is proposed to review the history of tariff from the time the Union was formed.

It may also be pointed out that in the United States tariff implies merely a set of duties on taxable imports. When duties are levied for revenue purposes, it is known as revenue tariff ; when they are intended for protecting industries, it is known as protective tariff. For a long time it was the main source of revenue ; hence the tariff system was not only often influenced by either protectionist or free trade notions, but also by the requirements of the treasury. In the United States, therefore, the financial and tariff history were intimately connected. Further, it became a lively issue for the political parties of the country and, therefore, there was oscillation in the tariff level according to the party which was in power. In fact

these tariff wars gave it an appearance of being unscientific.

The first tariff was embodied in an Act of 1789. It levied duties which were partly ad valorem and partly specific. The average ad valorem duties were 8½ per cent. Goods imported in American ships were given a reduction of 10 per cent. It was in reality a revenue measure because the duties were so low that they could not be regarded as protective. But according to the preamble of the Act, it was meant for the protection and encouragement of manufactures. It must be, therefore, regarded that this part of the preamble was meant to be a gesture to the protectionist party.

In the next decade, the unification of the country was nearly complete and she was in position to take advantage of tariff for industrial development. As stated before some factory industries were established in the period of Continental blockade. At the end of the Napoleonic wars, the competition of England, which was absent for some time, revived again and the imports from England increased from \$ 12 millions in 1814 to \$ 115 millions in 1815 and \$ 147 millions in 1816. The manufacturers who were alarmed at this, demanded protection on the principle of protecting infant industries. A protective tariff was adopted in 1816 and thus began the history of American tariff. On an average the duties were about 20 per cent.

But this measure did not satisfy the high protectionist manufacturers. They started protectionist associations to demand a revision of tariff. Tariff also became an issue for the political parties. The crisis of 1819 brought down prices of industrial as well as agricultural goods. Consequently some changes in duties were made in 1819 and 1824. But the most important tariff Act of this period was that of 1828. This was a year of presidential election and there were

two leading candidates, Jackson and Adams. The Low-Tariff Jackson party introduced a very high tariff thinking that the High-Tariff Adams party would turn it down as too high and thus would be stultified. The Adams party could not reject it if the protectionist votes were to be secured. Thus the bill which was loved by none became law. All the duties were raised upwards. The tariff of 1828 therefore is known as the "Tariff of Abominations" or "Black Tariff."

The agricultural South was furious against the tariff of 1828. A memorial from the Charleston Chamber of Commerce asked : "Have you calculated how far the patience of the South exceeds their indignation, and at what precise point resistance may begin and submission end"? Georgia also submitted that "an increase in tariff duties will and ought to be resisted by all legal and constitutional means". John Randolph declared : "We are insulted, proscribed and put to ban ; if we do not act, we are bastard sons of the fathers who achieved the Revolution"!* The Act was not popular with any section and moderates wanted to compromise with the South. The South also had realised the importance of giving some protection to industries and, therefore, after protracted deliberations, a compromise was arrived at. The Compromise Tariff Act of 1833 provided that all duties in excess of 20 per cent. should be reduced to that level by July 1, 1842.

The tariff of the period 1833-60 is marked by great vacillation. This was partly due to the serious crises in 1837 and 1857. During the depressions which followed them prices fell seriously, but as some of the industries, particularly cotton and woollen, had made substantial progress, the infant industries argument

* Jennings. A History of Economic Progress in the United States. pp. 283-84.

could not be put forward to demand higher protection. The industrialists, therefore, demanded protection on the ground of wages. They contended that wages in other countries were lower than in America and, therefore, such low-wage countries were able to compete with American industries. Protection, therefore, was necessary to protect the interests of home industries.

In the years of the depression after the crisis of 1837, the revenue of the Federal and State governments declined, and therefore, some of the terms of the Act of 1833 could not be given effect to. On the contrary in 1841 an all-round 20 per cent. duty was introduced on all goods paying lower duties except tea and coffee. In 1842 duties were raised still further and the average level of duties reached 33 per cent. instead of 20 as declared by the Act of 1833.

The changes of 1841-42 helped recovery and by 1844 the country was again enjoying prosperity. The free trade tendencies which were noticed in 1833 again raised their head. The Democrats who succeeded to power in 1844 were also in favour of lower duties. The result was the Walker Tariff of 1846. In introducing a liberal measure, Walker contended that as a general rule a duty of 20 per cent. ad valorem was enough to raise adequate revenue for the state, that higher duties were threatening a war with Mexico, that protection was against the spirit of the constitution and that while duties had doubled and prices had increased, wages had not advanced proportionately and, therefore, higher protection meant suffering for the general public. The main features of Walker tariff were that all minimum and specific duties were abolished, commodities were divided into a number of classes and articles in one class were made to pay the same duties. Different rates of duties were levied on different classes.

The country enjoyed a period of prosperity after 1848. The position of the treasury also improved. In 1857, therefore, a further lowering of duties was proposed. By an Act of this year, duties were reduced by 25 per cent. on nearly all commodities and the free list was extended. The average level of duties came to 19 per cent. This was the lowest tariff for nearly half a century. But soon after this reduction the country was faced with a severe crisis; prices fell and the revenue of the government declined. Again a measure for increasing duties was passed by the Congress in its session of 1859-60 which after being passed by the Senate became the Morrill Tariff Act of 1861. By this Act the level of duties contained in the Walker tariff was restored. Duties were changed from ad valorem to specific but in doing so they were raised. At this stage the Civil War broke out.

During And After The Civil War

As in industry, agriculture and transport, the Civil War provided a turning point in the tariff history. During the war the level of tariff was raised for three reasons: (1) there was an urgent need of revenue for carrying on the war; (2) manufacturers were called upon to bear higher internal taxation and, therefore, they were compensated by higher import duties. Morrill contended that "if we bleed manufacturers, we must see to it that the proper tonic is administered at the same time"; and finally (3) the protectionist influence in the Congress had increased. During the war, therefore, the tariff policy was guided by the principle: "Wherever you find an article, a product, a trade, a profession or source of income, tax it."

Of the war time measures the Act of 1864 was the most important. According to Taussig this is the greatest measure of taxation that the world has ever seen. There was an all-round increase in duties. The

level of tariff which was 19 per cent. in 1857 and 37 per cent. in 1862 was raised to an average of 47 per cent. The free list also was cut down. During the war there was little opposition to the duties because of the feeling prevailing among the people that it was an emergency measure and that as soon as the emergency was over the government would return to liberal taxation. Unfortunately, however, these hopes were belied by the subsequent history.

When the war was over, the financial system was reorganized and internal revenue duties were gradually reduced. But the tariff duties remained untouched. No effort was made to reduce import duties which were originally raised to be compensatory to internal duties. This led to discontent among farmers who had to pay higher prices for manufactured goods. In 1872, therefore, the government made a gesture to the farmers and by an Act of that year duties on nearly all classes of manufactured goods were reduced by 10 per cent. Duties on tea, coffee, etc., were abolished. This policy came to be known as 'the free breakfast table policy'. But these changes were shortlived. The crisis of 1873, affected the whole world but more particularly the raw material producing countries. There was an acute panic in America. In 1875, therefore, the Act of 1872 was repealed and duties were restored to their former level. Thereafter until 1883 little change was made in tariff.

The period after 1883 is marked by an attempt to intensify tariff inspite of the advice of the Tariff Commission of 1882 and President Cleveland to the contrary. The latter denounced the tariff as "the vicious, inequitable and illogical source of unnecessary revenue". In 1888 the presidential election was fought on the tariff issue. Harrison was nominated by the Republican party and Cleveland by the Democrats.

The Republican party succeeded and, therefore, interpreted its success as an indication of the people's desire for higher protection. The result was the McKinley Tariff Act of 1890. The economic conditions in the country did not warrant the enactment of such a measure of higher tariff, because during the period 1870-90 industries had made a remarkable progress. For example the production of steel had increased from 334,000 tons in 1871 to 1,871,000 tons in 1890. The argument of infant industries also could not be used to support it. The arguments which carried the day, however, were the reservation of the home market for home industries and national self-sufficiency.

According to the provisions of the McKinley tariff, higher duties were placed on all imported commodities. Various farm products were also given protection. The average level of duties was 49.5 per cent. Another important feature of this tariff was the power given to the President to negotiate reciprocity treaties to find markets abroad for the growing industries of the United States. It was also provided that if any country's fiscal policy was unfavourable to the United States, such a country should be penalised by the imposition of higher duties. Reciprocal agreements were signed with a number of countries in the subsequent years.

The McKinley tariff did not end the tariff controversy. In the next election, the Republicans were defeated and the Democrats secured a majority. In 1894, therefore, another tariff Act known as the Wilson-Gorman Act was passed by which duties were reduced. The resulting level of duties was 39.9 per cent. Some articles like wool were placed on the free list. But in less than two years after this Act the Republicans again came to power on the question of silver. Between 1893 and 1897, the revenue income of the government also had declined because of the currency

disorders which followed the panic of 1893. A new tariff measure, therefore, was enacted by which higher duties were levied. The Dingley Tariff of 1897 gave protection to nearly every commodity that needed it. The level of duties, probably the highest ever reached, was 57 per cent. The same measure revised the plan of reciprocity abolished by the Act of 1894 and made certain changes in it. A number of commodities were selected and the President was given power to reduce duties on them for the purpose of reciprocity agreements. Subsequently reciprocity treaties were signed with France, Germany, Italy and Portugal.

The Dingley tariff remained in force for twelve years. During these years little attempt was made to alter tariff because the Republican party continued in power. Absence of tariff changes was also due to the fact that during this period the country was prospering and that there were other problems like the trust problem which required more immediate attention. A change was also noticed in the attitude of the Republican party to the tariff question. In 1904 they declared that "the measure of protection should be always at least equal to the difference in the cost of production at home and abroad". In 1908 they advocated: "In all tariff legislation the true principle of protection is best maintained by the imposition of such duties as will equal the difference between the cost of production at home and abroad, together with a reasonable profit to American industries". Under the influence of less extremist Republicans, therefore, in 1909 a tariff measure was enacted. The Payne-Aldrich Tariff Act of this year removed duties on some articles, and reduced on others. In spite of these alterations, the essential character of Dingley tariff remained unaffected. Another feature of the Act was the introduction of maximum and minimum duties. The reciprocity provisions of the Acts of 1890 and 1897 had

not succeeded as expected. The Act of 1909, therefore, provided for retaliation. It was laid down that if any country discriminated against the United States by high duties, additional duties of 25 per cent. over the minimum may be levied against the imports from such country. The power of raising duties was given to the President.

About the time the Payne-Aldrich tariff was passed, the opinion in the country was becoming discontented with the tariff policy. The monopoly evils and high cost of living were attributed by them to high tariff. In the Congressional election of 1910 and the presidential election of 1912, the Republicans were defeated. The Democrats who assumed power took prompt action. President Wilson declared: "We must abolish everything that bears even the semblance of privilege of any kind of artificial advantage and put our business men and producers under the stimulation of a constant necessity to be efficient, economical and enterprising masters of competitive supremacy, better workers and merchants than any in the world. Aside from the duties laid upon articles which we do not, and probably cannot produce, therefore, and the duties laid upon luxuries and merely for the sake of the revenues they yield, the object of the tariff duties henceforth laid must be effective competition, the whetting of American arts by contest with the arts of the rest of the world". The Democrats, therefore, introduced a measure for the reduction of duties. By the Underwood Tariff Act of 1913 a number of duties were reduced and some were altogether abolished. The number of articles in the two categories affected as above were 958 and 100 respectively. But the Underwood tariff could not be regarded as indicative of a change in the principles of tariff policy. (It certainly did not mean free trade.)

Soon after the above measure was enacted, the

public opinion demanded that the machinery of tariff should be placed on a sound footing. It was also felt necessary that there should be a body which would make a study of foreign tariff and the tariff effect at home. In 1916, therefore, a Tariff Commission was created by a special Act. The powers given and duties entrusted to this Commission were : the investigation of matters relating to the tariff administration ; the study of fiscal and industrial effects of American tariff laws ; the investigation of tariff regulations in other countries : the study of the conditions of competition in world trade ; and the summoning of witness and the securing of information. It was hoped that tariff would be rid of political manoeuvring when the matter was entrusted to an expert commission.

After the Great War was over, American industries were faced with a problem of a different nature. During the war the capacity of these industries was extended. The industrialists, therefore, feared severe competition from the reconstructed European industries in need of markets. More particularly competition was feared from German industries. It was also argued that the industries in the United States were handicapped by high labour and material costs. The Republicans who came to power in 1920 were in favour of higher protection. In 1921, therefore, an Emergency Tariff Act was passed and was followed by a permanent measure, the Fordney-McCumber Act of 1922. The latter measure raised duties above the level prevailing in 1909, allowed an additional duty upto 50 per cent. above the minimum in case American goods were treated unfairly in foreign countries and charged the Tariff Commission with the duty of reporting to the President on the working of foreign tariff policies. Duties were also imposed on agricultural products.

In 1930, after the first effects of the depression were over, another tariff measure was enacted, the

main provisions of which were : (1) It prohibited the importation of goods produced by convict, forced or indentured labour : (2) it directed the Tariff Commission to investigate the relation of costs of production of certain goods at home and abroad. Such an investigation was to be made at the request of the President, or of either houses of the Congress, or on its own initiative by the Commission. The President was then authorised to approve by proclamation the recommendations of the Commission if in his judgement any changes were necessary to equalise the difference in costs ; and lastly (3) it increased many duties on agricultural and industrial goods. This Act like its predecessor aroused a good deal of indignation in foreign countries as an attempt on the part of the United States to shut out the goods of other countries and make them pay their debts and interest in terms of gold. Since then the only important change made was that the President was authorised by an amending Act of 1934 to reduce duties upto 50 per cent. if such reduction was necessary in concluding commercial agreements with other countries to find markets for American goods. This was certainly a departure from the attitude of retaliation adopted in the Payne-Aldrich Tariff of 1909.

Thus from the beginning of industrial growth in the United States industries have enjoyed high protection. Its effects have been mixed. It is no doubt true that the immense industrial development of the country, the utilisation of her equally immense resources and the employment of large population have been made possible by it. But at the same time its prohibitive character has stimulated the industrial trend towards monopoly with a view to exploit the helpless home market. Though laws have been passed to check the development of monopolies, they have not been completely successful. Further, protection

has been unfortunately mixed up with politics. Tariff Acts were passed in quick succession according to the changes in the party which held power. To what extent political corruption exists it is very difficult to say. But the following words of Sir William Beveridge would probably appropriately describe the relation of protection to politics in the United States : "In a protectionist country the development of industry is guided by politicians or by business men become politicians, by business men organising press campaigns and lobbies getting secret or open representatives in Parliament ; the separate industries compete with one another, not in efficiency of production, but in political influence and in the technique of pulling wires"*. One may as well feel that Sir William had in his mind the example of the United States in writing these words. America set an example for other countries, particularly the European countries in framing their fiscal policies. The post-war world witnessed a race in economic nationalism which was in no small degree responsible for the severity of the Great Depression.

Chapter XIII

TRANSPORT, COMMERCE & LABOUR Growth of Transport

The development of the means of transport before the Civil War as discussed in Chapter XI has shown how they were vital to the opening of the country and the utilisation of her vast resources. The interest in the construction of roads suffered after the canals and railways were constructed as quicker means of trans-

* H. Beveridge and others, Tariffs, The Case Examined, p. 231.

port. For nearly three-quarters of a century little progress was made in the road system. In 1890 they again attracted attention when a "good roads" movement was launched in Chicago. Since then with the growing use of motor cars for transport, construction of roads received increasing attention of the State and Federal governments. In 1913 the expenditure of the State governments on the construction of roads amounted to \$ 37 millions ; another \$ 137 millions were spent by local governments. Consequently, between 1916 and 1922 about 28,000 miles of roads were built. In 1926, on the basis of area and population, there were 80 miles of roads per 100 sq. miles and 2,550 miles of roads per 100,000 of population.

After the Civil War, the use of river and canal transport declined and railways began to attract more and more traffic. This tendency was no doubt caused by the better facilities offered by railways. Yet in spite of this decline, the construction of canals was undertaken where necessary. Thus the Cape Cod Canal was built connecting the Buzzard's Bay and the Barnstable Bay in 1914 ; in the same year the Houston Canal was completed. Money was also spent on increasing the utility of old canals. Unlike rivers and canals, the lake transport, however, became more popular. Steam and steel ships were introduced for carrying traffic on lakes and the total tonnage of goods carried by them continued to grow. In 1916 the total freight tonnage registered was 91,888,219.

The railway development in the United States after the Civil War progressed hand in hand with the development of material wealth. The railway mileage, which was 30,635 increased to about 250,000 in 1930. It was, however, unequally distributed over the country. The region west of the Mississippi benefitted the most. The South which was neglected upto 1880 received more attention in later years. Yet the mile-

age in the South was not more than 25 per cent. of the total railway mileage of the country.

One of the most important features of railway development after 1860, was the construction of a railway connecting the Atlantic and Pacific seabords. Such a project was thought of as far back as 1834, but it was dropped as being impracticable. But the subsequent discovery of gold in California and of silver in Colorado showed the necessity for such a railway. The necessity of a transcontinental railway for keeping political control over the distant parts of the country was also brought home during the Civil War. The government, therefore, encouraged the project by giving money and land. It gave about \$ 55 millions and 25 million acres of land. The project was completed in 1869 and since then has been responsible for the development of trans-continental trade, the extension of agricultural area in the west, the growth of mining industry and the immigration of a large population from Europe desirous of settling in the newly opened regions.

The consolidation movement in railways started before the Civil War. It was encouraged by two objects. Firstly, the presence of many short lines built by small companies subjected travellers to a good deal of inconvenience and, therefore, to overcome it companies were consolidated to form a continuous line. Secondly, combinations were also formed to restrict competition and economise in costs of management. Such combinations generally brought under one control railways in a certain geographical area. The first combination of the former type was the New York Central formed in 1853 by combining 11 railways. Between 1855 and 1858 five other railways were added to this combine. Thereafter many more combinations of this type were formed. All of them had the object of providing

through line of travel and, therefore, did not arouse any public resentment. But after 1880, the object of combinations changed from mere provision of convenience to travellers to one of eliminating competition and of securing a monopoly control over traffic. The devices used for such combinations were either an outright purchase of competing companies or of leasing of lines or of holding of stock of one company by another or of forming a community of interests in the managements of different companies. Either one or more of these methods were used in combining different railway lines. The result of these combinations was that by 1906 seventeen systems controlled 176,000 miles of railways out of a total of 228,000 miles. The most important systems and the mileages controlled by them were :

Systems	Miles
Vanderbilt	21,300
Pennsylvania	20,400
Morgan	17,800
Gould	16,900
Harriman	19,200
Hill	21,300
Rockefeller	10,300

The consolidation movement of the nineteenth century continued to make progress in the twentieth. Recently a merger was formed by the Van Sweringen interests of Cleveland controlling nearly 14,000 miles of railways. But the consolidation of railways led to many evils one of which was discrimination in rates. Lower rates were given to cities than to ports because of internal competition. This led to opposition to railway combination and a number of cases were filed in the courts against them. The public also demanded that the state should intervene and safeguard its interests. In 1912, therefore, by the Panama Canal Act control of railways over water transport was

prohibited. Two years after this by the Clayton Anti-Trust Act owning of stock by one carrier in another was made illegal if its effect was likely to reduce competition.

The general control of the government over railway companies was embodied in the State legislation undertaken as far back as 1869. But the first Federal legislation was the Interstate Commerce Act of 1887. This Act prohibited discrimination among persons, places and commodities ; pooling contracts were also prohibited and railways were forbidden to charge more for a short than long haul ; rates were to be published and were subject to change only on a public notice : and finally they must be reasonable and just. If they were unjust and unreasonable, they were unlawful and would be a valid ground for suit for damages by the injured party. To enforce the provisions of the Act an Interstate Commerce Commission consisting of five persons was set up.

The evils of railway management continued to persist in spite of the above Act. It was, therefore, amended from time to time. By the Elkins Act of 1903, discrimination and rebating were more clearly defined. The Hepburn Act of 1906 gave detailed powers of supervision to the Commission ; it laid down that the Commission should determine and prescribe the just and reasonable rates. The Mann-Elkins Act of 1910 gave the Commission power to suspend changes in rates until it could hold hearings and determine their reasonableness. A Commerce Court was also established to hear appeals against the decisions of the Commission.

When the United States entered the last Great War in 1917, all the railways were placed under the Federal control and were entrusted to a director-general. In 1920, they were handed over back to their private owners. By an Act of this year far-

reaching changes were made in the control of the Federal government over railways. It permitted pooling agreements which were forbidden under the Act of 1887. The Interstate Commerce Commission was empowered to determine and prescribe the maximum rates. It was also authorised to work out a regional grouping of railways and to regulate capitalization. Further if the net operating income of railways exceeded 6 per cent. it was provided that half of the excess was to go to the government. The labour clauses of the Act provided for the settlement of workers' disputes. It authorised the establishment of Railroad Boards of Adjustment for the settlement of disputes other than wages; for settling wage disputes a salaried Railroad Labour Board was created. The law neither restricted strikes nor provided for compulsory arbitration, but urged workers to obtain settlement of disputes by arbitration or conciliation.

The significance of railway development in the economic progress of the country has been summed up by a writer by saying that "for years the history of the railroads was the history of the country". The extensive cultivation of cotton in the South and of grain in the mid-West was intimately bound with the construction of the railways. With the mechanisation of agriculture and the increase in the farm area, the home market was not sufficient for the American farmers to dispose of all their produce. They had to depend on foreign markets to absorb a part of it. But exports of grain at competitive prices could be possible only if the railways provided a cheap means of transport. The farmers were able to secure cheap rates because of the competition between railway companies and the competition of water transport with railways. The railways also were able to quote cheap rates because of the mechanical improvements of the nineteenth and twentieth centuries. They also

helped farmers by building elevators for the storage of grain. Further when the transcontinental line was built and free land was provided under the Desert Land Act of 1877, ranches developed in the far West. Cattle traffic from these regions was favoured by low freights and increased size of wagons. After the introduction of the refrigerator car in 1878, the United States became an exporter of meat to European countries. Even the development of manufacturing industries depended on the railway system because raw materials and manufactured goods had to be carried over long distances. Lastly, the immigration of people from foreign lands and their settlement in the uninhabited tracts of the country was rendered possible by railways. Hence railways have played a vital part in the economic development of the United States.

The shipping of the United States engaged in foreign trade expanded after 1800 until it reached the figure of 2,500,000 tons in 1860 which was equal to the then tonnage of England. After the Civil War, because of the changes in the construction of ships, the tonnage of the United States declined until in 1898 it was only 726,000. In the first decade of the twentieth century, however, with the growth of export trade and the iron and steel industry, the tonnage registered began to increase. In 1914, it was 1,076,000. When the war broke out, the Congress made many changes in the conditions of registration of vessels in the United States. Consequently the tonnage registered increased to 2,191,700 tons. But even this was inadequate to cope with the export trade of the country and, therefore, in 1916 a Shipbuilding Act was passed and a Shipping Board was created. It was authorised to encourage construction of ships. In addition as the tonnage of foreign countries had declined considerably because of enemy action the need for a larger

tonnage for the trade of the United States was urgently felt. By 1920 the tonnage increased to 13,189,000. In the same year a Merchant Marine Act was passed to encourage the development of the American mercantile marine. Consequently in 1929 the total gross tonnage of the United States was 14,377,000. It was only second to that of England whose tonnage in 1929 was 20,166,000.

The Growth of Commerce

The period after the Civil War noticed a growth of both imports and exports. They were valued at \$ 353 millions and \$ 316 millions respectively in 1860. By the end of the century their respective values were \$ 875 millions and \$ 1400 millions. Excepting a few years, during the period 1860-1900, the United States had a favourable balance of trade and she was able to pay off a part of her old debts. The year 1900 was remarkable for the record figure of exports and also for the highest percentage of manufactures in exports. Thus the character of export trade had undergone a striking change and reflected the progress which the country had made in the previous decades. The percentages of agricultural and manufactured goods were respectively 62 and 35. With the development of the West, the exports of wheat, livestock and meat increased manifold. Cotton suffered a relative decline. Among the manufactures, there was a remarkable growth in the exports of iron and steel and their manufactures: their value increased from \$ 5 millions in 1860 to \$ 121 millions in 1900. As regards the direction of trade 74 per cent. went to Europe, 13 per cent. to North America, 4 per cent. to Asia, and 2 per cent. to South America.

The imports in this period were characterised by declining importance of manufactures. In 1860 they constituted nearly one-third of the import trade;

in 1900 they were only one-sixth. On the other hand the proportion of raw materials increased from one-sixth in 1860 to one-third in 1900. Thus the character of both imports and exports fully showed the rapid industrialisation of the country. As regards the direction of imports, 51 per cent. came from Europe, 15 per cent. from North America, 16 per cent. from Asia, and 11 per cent. from South America. Thus the foreign trade of the United States was mainly with Europe.

In the 40 years after the Civil War the internal trade of the United States expanded in volume and scope. In the absence of accurate statistics, the size of the trade could be gauged only from the volume of goods carried by the different means of transport. The volume of goods carried by railways increased from 26 million tons in 1860 to 594 million tons in 1900 ; the increase in the traffic on the inland waterways for the corresponding period was about 64 million tons. Goods entering inland trade in their order of importance were minerals, manufactures, forest products, agricultural products, merchandise, animal products and other. The organization and methods of commerce also changed according to the needs of the growing volume of trade. Big retail establishments like the department stores were started soon after the Civil War. The number of specialised middlemen handling goods in internal trade also increased and facilitated the distribution of the huge volume of agricultural and industrial products.

In the Twentieth Century

If the export trade of the United States before 1900 had created a stir in the industrial circles of Europe, the feeling in the early years of the twentieth century was one of panic. The course of foreign trade in the period 1900-29 will be shown by the following figures for selected years :

	Imports	Exports
(In million dollars)		
1900	875	1400
1914	1894	2364
1917	2659	6290
1920	5278	8229
1929	4339	5157

From the above figures it becomes clear that the import as well as the export trade was growing fast before the war. After the war broke out the growth of the export trade was almost phenomenal. This was no doubt due to the demand from Europe for foodstuffs, raw materials and munitions. The excess of exports over imports, which for the year ending June 30, 1914 was only \$ 471 millions, jumped up to \$ 1094 millions in 1915, \$ 2136 millions in 1916 and \$ 3631 millions in 1917. When the United States entered the war there was a slight decline in the foreign trade, but when the war ended, the trade figures again jumped to unprecedented heights. This was partly due to the revival of European demand and high prices. From 1920 there was a falling off in foreign trade, more particularly in the exports of agricultural goods, because of the rehabilitation of agriculture in the European countries. The import trade of the country, however, continued to grow and thus the large favourable balance of trade which was enjoyed for some years by the United States was narrowed down.

The character and direction of trade also have showed remarkable changes in the first three decades of the twentieth century. The exports of manufactured goods continued to grow and accounted for nearly half of the total exports. Among the agricultural exports, in 1924 cotton alone accounted for 21 per cent. of exports. The direction of trade also has changed.

The percentage of exports to Europe declined from two-thirds of exports to nearly one-half ; the loss thus occasioned was made up by increased trade with North America, South America and Asia. In the imports, the proportion of raw materials increased from one-third to one-half, while manufactured goods accounted for only one-fifth. The direction of the imports like that of exports underwent a change. The imports from Europe declined from one-half to one-fourth ; the place of European imports was taken up by goods from North America, South America, Asia and Africa.

With the rapid increase in the foreign trade of the country and the resulting prosperity of the people, the internal trade increased by leaps and bounds. Though accurate statistics are difficult to obtain, a rough estimate shows that the value of such trade which was \$ 20,000,000,000 in 1900, increased to \$ 37,000,000,000 in 1910 and \$ 103,000,000,000 in 1920. The unprecedented figure of 1920 is no doubt due to the high prices prevailing in the post-war years. On the basis of value in 1920 the internal trade of the United States was larger than the total world trade. The organization and methods of commerce also improved to satisfy the demands of a growing trade. In 1920 there were about 300 department stores, 1000 chain stores and 100 mail-order establishments in the retail trade. The number of banks, insurance companies, storage houses and chambers of commerce also increased. Similarly, the growth of commercial education and advertising agencies helped the efficient organization and sale of commodities. Thus the immense growth of commerce of the United States in the early twentieth century must be attributed to her untold material resources and the skill of her people.

Since the depression of 1929 the foreign trade of the United States has gone down considerably and

inspite of the wide powers given to the President to enter into trade agreements, it does not show much improvement. The following figures show the value of exports and imports in recent years. §

	Exports	Imports
	(In million dollars)	
1930	3,843	3,060
1933	1,674	1,449
1937	3,345*	3,084

The Trade Union Movement & Labour Legislation

There was no organized labour movement before the Civil War though an attempt was made in some cities to start workers' organizations. The first experiment at combining workers was made in Philadelphia and several trades organized the Mechanics' Union of Trade Associations. Writing about this labour enterprise the Mechanics Free Press, labour journal, said : "This is the first time that the working men have attempted in a public meeting to enquire whether they possess as individuals or as a class any rights to say by whom they shall be governed". With the growth of industry, the example of the Philadelphia workers was followed by workers in other cities to demand shorter hours of work, higher wages and better working conditions. But before the Civil War there were no important national organizations of labour formed in the United States.

The reasons for the absence of a regular workers movement lay in their environments. Firstly, the transport and communication facilities were not adequate for the size of country. Secondly, the organiza-

§ Thomson and Jones, *Economic Development of the United States*, p. 523.

* Including re-exports.

tion of industry was much more simple than after the Civil War ; the size of manufacturing units was small, the division of labour was not minute and the touch between the employer and workers was not altogether lost. Thirdly, if a worker was dissatisfied with the conditions in industries, he had always an alternative opening in agriculture by securing cheap land offered by the state. And lastly, the habits of the people were simple, the leisure class was not very large and there was, therefore, no rise of class consciousness among workers. Thus the economic conditions in the country were unfavourable to the growth of national trade unions. Yet in the decade before the Civil War an attempt was made to form such unions, e.g., the International Typographical Union (1850) and the National Trade Association of Hat Finishers of the United States of America (1854).

The Civil War, however, marked a turning point in the history of the labour movement. During the years of the war, because of the inflation of currency, prices rose very high, but wages did not rise proportionately. In 1865 the prices had risen by 76 per cent. as against those prevailing in 1860 ; but wages rose by 50 per cent. only. This had created great discontent among workers. Even after the war, the sufferings of workers did not end because of the tariff policy of the government. This growing unrest of the workers was aided by other factors. The establishment of the big factories and the introduction of minute division of labour tended to do away with the need of skilled workers and they were reduced to the ranks of the unskilled. Consequently wages offered were low. Side by side with this change the power of employers was growing and was widening the gulf between them and workers. The workers had to organize themselves to prevent further deterioration in their economic position. This growing urge for organ-

ization was helped by the spread of education and the development of the press. They facilitated the exchange of ideas and the teaching of the aims and objects of organization and helped the promotion of solidarity in the ranks of workers.

After the Civil War the discontent of workers was echoed amongst farmers. They were dissatisfied with the prevailing economic conditions ; they complained about bankers, railways and distributors. The unrest among them, however, was largely due to over-production and low prices and as soon as the latter improved the unrest disappeared. This movement, therefore, never showed great strength.

For reasons mentioned above, the trade union activity of industrial workers became brisk during and after the war. Between 1861 and 1873 alone, 23 trade unions were formed. Of the various national trade unions which were started after 1860, only two were very important : The Noble Order of the Knights of Labour, otherwise simply known as Knights of Labour, and the American Federation of Labour.

The Knights of Labour was formed in Philadelphia in 1869 by U. S. Stevens. Membership was thrown open to all workers irrespective of nationality, sex, creed and colour. Their aims were to secure to workers the fullest enjoyment of the wealth created by them and leisure for the development of their intellectual, social and moral faculties ; in short the workers were to be enabled to share in the gains and honour of the new civilisation. To attain these aims they demanded : referendum in making laws ; starting of labour bureaus for the collection of information ; abolition of speculative sale of land ; laws that would apply equally to workers and capitalists ; compensation for injuries suffered through negligence on the part of employers ; compulsory school education between the ages of 7 and 15 ; a graduated tax on incomes

and inheritances ; government ownership of railways, telegraph and telephone, and lastly the introduction of an eight-hours day. They did not favour strike as a weapon to attain these aims. The organization of the Knights of Labour was highly centralised. Its General Assembly had full and final jurisdiction in all matters. In 1886 its membership was 600,000.

After an early success the Knights of Labour failed to make progress. The main causes of failure were : (1), the aims were too idealistic to make an appeal to workers of average intelligence ; (2) the excessive centralization of authority created jealousy in the minds of subordinate officers and members ; (3) its political activities reacted on its work ; (4) the mixed composition of its membership led to a conflict of views ; (5) its funds were frittered away on co-operative experiments ; and lastly (6) after showing opposition to strikes in the beginning, it launched a number of merely sympathetic strikes. Thus the Knights of Labour failed to make progress for a variety of reasons. But all the same it must be admitted that it served a useful purpose in that it trained workers in organization and understanding of the importance of a definite programme ; it also brought to the notice of the public the existence of a number of evils in the industrial field.

The American Federation of Labour was started in 1881 with a membership of 262,000 by a number of trade unions which were dissatisfied with the work of the Knights of Labour. The fundamental difference between the principles of the two organizations lay mainly in the attitude to membership. While the first favoured the organization of members who belonged to a single vocation, i.e., wage-earners, the latter, the Knights of Labour, was prepared to allow membership to all productive workers whether they received their compensation in the form of wages or

not. It believed that the divergent interests of individuals could be harmonised in the interests of the whole even by ignoring their vocations. The authority of the American Federation of Labour was also less centralised than that of the Knights of Labour and the federating unions had more autonomy. Only matters of general interest came before the General Assembly.

The aims and objects of the Federation were less idealistic than those of the Knights of Labour. Its aim was to promote the general interests of associated workmen. Workers' conditions were to be improved by influencing public opinion and by peaceful and legal methods. It was not, however, opposed to the use of strikes, boycotts and unfair lists because it regarded them as the legitimate weapons of workers. It was also in favour of mutual aid and running a labour press.

The membership of the Federation continued to grow from decade to decade except in years of depression as the following figures will indicate :

Year	Members
1890	190,000
1900	550,000
1904	1,676,000
1917	2,371,000
1920	4,079,000
1931	2,889,500

The American Federation of Labour remained the dominant labour organization until recently when splits occurred among the leaders on the question of policy. The A. F. L. believed in the organization of craft unions under the leadership of William Green, while the Committee for Industrial Organization (C. I. O.) led by John L. Lewis believed in the organization of industrial unions. The breach still remains

unbridged to the detriment of the interests of organized labour *.

In the nineteenth century little attempt was made to organize unions of radical workers. In 1905, however, one such attempt was made and the organization was called the Industrial Workers of the World. It was a revolutionary body based on the syndicalist doctrines of Sorel and believing in direct action to subvert the existing social order. Its membership was open to the skilled as well as the unskilled, and to natives as well as foreign workers. Its progress was very limited. In 1921, its membership was 100,000.

Until recently there was no law which permitted the organization of trade unions and protected their interests. This was largely due to the individualistic character of American law which led the courts to declare unconstitutional any attempt on the part of legislatures to protect the working class organizations by statute. The legal position of trade unions, therefore, continued to be uncertain and depended on the decisions of courts. Some of the decisions, however, had cleared the position. Thus strikes were illegal only when they involved defamation, fraud, actual physical violence or inducement to commit a breach of contract. Boycotts were illegal when they brought third parties into disputes by threats of strike or loss of business, publication of unfair lists or by interference with interstate commerce. Picketing was illegal when it was accompanied by violence, intimidation or coercion. The trade union organizations, however, could not depend on these decisions as they could on a specific law, as long as the interpretation of law was at the discretion of individual judges. As late as 1922 the Supreme Court decided in the Colo-

* Thomson and Jones, *Economic Development of the United States*, pp. 521-22.

rado coal case that labour organizations, although unincorporated, were liable for prosecution under the Sherman Law for restraint of interstate commerce and they could be also sued for their acts as an organization. At last the NIRA recognised by section 7 trade unions and collective bargaining. When the NIRA was declared unconstitutional, the rights conferred on labour by section 7 were embodied in a new Act known as the Wagner Act of 1935.

A review of the trade union movement over the whole period, 1860-1933, shows that the number of organized workers has been small compared to the total organizable workers. An estimate made by Prof. Barnett for the pre-war period showed that while in 1900 the number of organizable workers was 21 millions, the percentage of organized workers was only 3.5; in 1910 when the former number had increased to nearly 30 millions, the percentage of organized workers hardly increased to 7. Before the war, the total number of organized workers never exceeded 2.5 millions. After the armistice, the total number showed a considerable increase and was for some time in the neighbourhood of 5 millions. But with the effects of the depression of 1929-1930, the number went down considerably and was estimated to be 2 millions in 1933. In this year not only was the movement poor in membership, it was even poorer in ideas. Further its progress was marred by splits. The President of the A. F. L. had stated publicly that with the failure of industry and finance, he could see no future for the American workers.* Thereafter though there was some improvement in numbers, the position could not be regarded as very satisfactory.

The causes which have been responsible for the slow growth of trade unionism, stated briefly, were :

* Huge, Jones & Radice, *An American Experiment*, pp. 124-25.

(1) In the earlier period of the industrial revolution in the United States, the workers did not show hostility to capitalism and they, therefore, never showed any inclination to combine against it. The classes of the society were in a constant flux and a worker always cherished an unexpressed hope of rising from the class of workers to that of employers. (2) There was always a chance, as said before, for a dissatisfied worker to go west and become an agriculturist. This opportunity of course disappeared as years rolled on. (3) A very large portion of American workers was less specialised and, therefore, could easily change employment. The mobility of labour has been no doubt a factor in the indifference of workers to organization. (4) The American worker, like his counterpart in Europe, could not make himself politically felt. The two great political parties, the Republican and the Democratic, dominated the field and could not permit the rise of a third party. (5) In the United States labour has been regulated by the States and, therefore, there has been a diversity of laws and standards in different States. The organization of powerful national unions was rendered difficult because of the resulting differences in worker's conditions. The American Federation of Labour remained the only national organization overshadowing others. (6) The body of American workers consists of immigrants from various nations; their languages have been also different; and further they never lost altogether their migratory habits. Any effective combination among such a heterogeneous mass of workers became difficult. (7) The organization of unions on a craft basis has been also one of the obstacles. The labourer has been migratory and has been aided in this habit by the introduction of labour-saving devices which reduced a skilled worker to the rank of the unskilled. This tendency no doubt facilitated his migration from one

place to the other, but discouraged him from being a member of a trade union, because if he changed his trade, he had to change his union also. (8) Lastly, the American workers have been unfortunate in regard to leadership ; they have been unable to get more than a few real labour leaders. It is very difficult to say which of these causes has been very powerful, but their combined effect certainly has retarded the vigorous growth of labour movement like the one either in England or Germany. ✓

Labour Legislation

Constitutionally the States are responsible for the passing of laws to protect the interests of workers. Before 1860 little activity was seen on the part of the States to protect workers though laws providing free education to children and for limiting the hours of work of children and women employed in factories were enacted in some States.

After the Civil War the State labour legislation increased in scope. For want of space, only an outline of this legislation can be given here. The following are the main features of recent legislation : Protection of freedom of contract ; restrictions upon the employment of women and children, including provisions regarding their health and comforts and provision of education to children ; protection of workers engaged in dangerous occupations ; compensation in cases of accident ; protection of workers in sweated industries ; the minimum wage laws ; provisions regarding inspection of factories ; laying down a procedure for the settlement of industrial disputes by arbitration and conciliation ; provisions relating to pay days and the nature of payment. As far as the hours of work of men are concerned, there has been great difficulty in restricting them by law. The courts have upheld restriction of their hours in dangerous industries only.

Nearly half the States and the Federal government have introduced an eight-hours day for employees in public works. In 1916 by the Adams Law the Federal government fixed the basic working day at eight hours for railway workers in interstate commerce.* There has been little difficulty in limiting the hours of work of women and children. In seven-eighths of the States laws have restricted the hours of work for women. In some they have been eight and in others ten. Night work is also prohibited for women in some States. Provision is also made in some States prohibiting employment of women for some period before and after child-birth. Now practically every State has prohibited the employment of children under 14 years of age ; their hours of work also have been regulated by a large number of States. In 1916 and 1919 the Federal government tried to legislate regarding child labour. By the Act of 1916, commodities produced by children were debarred from interstate commerce. The Act was declared unconstitutional by the Supreme Court. Again in 1919 a Federal excise tax of 10 per cent. was introduced on the income of manufacturers who employed children under certain conditions prohibited by law. This Act also was declared unconstitutional by the Supreme Court. Thus the attempts of the Federal government to legislate for labour were foiled by the Supreme Court.

In the field of social legislation, no progress was made beyond the provision of compensation for injuries suffered by workers during the course of employment. Till recently nothing was done to provide sickness, old age, unemployment and invalidity insurance as in some of the European countries. Some help of this nature, however, was provided by private

* For changes made in this regard by the Roosevelt administration, see the next chapter.

employers, notably railways and by some trade unions. When the Roosevelt administration secured from the Congress legislation for overcoming the effects of the great depression, emergency provision was made for relief to the unemployed and the indigent. The first important social legislation enacted by it was the Social Security Act of 1935 by which old age and unemployment insurance schemes were introduced and aid was provided for the better care of children, the blind, the physically handicapped and for better health. The circumstances leading to this Act and its provisions will be discussed in the next chapter.

Chapter XIV

THE NEW DEAL AND AFTER

The Economic Background

When the Roosevelt Administration assumed power in March 1933, it was faced with a critical situation unparalleled in the history of the United States. It had affected nearly the entire population of 139 millions responsible for 40 per cent. of world's production. The suffering of these people was all the more great because in the post-war period they had come to believe in their perpetual prosperity and the dawn of the 'Golden Age' of American capitalism. Suddenly after 1929 they found that the superstructure of prosperity which had engendered these beliefs crumbled with the foundations. They passed through such misery and sufferings as would have seemed incredible in the preceding period of mounting prosperity. Industry was depressed and leaderless. The farmers appeared to be on the verge of revolt. Banks collapsed right and left being unable to meet their creditors. The very people who in normal times would not have

brooked any detailed interference by the government with their social and economic activities prayed for action with the hope that it would be better than the mere policy of drift waiting for recovery to come of its own accord. In such conditions Roosevelt assumed power as the President.

The situation which faced the country had been rendered critical by two sets of economic circumstances, the one which had brought about a slow and less spectacular change in the physical facts of the country and outlook of the people requiring new forms of social and economic organization and the other was the result of a depression unparalleled by any depression in the history of the United States, not even the depression of 1873 and 1893.

As regards the first set of circumstances, the depression of 1929-33 presented America with a situation which was complicated by a profound change which had taken place in the economic organization of the country. In the previous depressions, the last frontiers of agricultural development had not reached their limit and, therefore, the unemployed could make a living by breaking new soil. The markets in Europe were expanding and, therefore, the additional production easily found an outlet. In 1929, this situation no more existed. The frontiers of development which by expanding served as a cushion to absorb the economic shocks had already reached their limits. Unmindful of these changes the state had made no provision for the unemployed as in some of the European countries. Further during the past decades, while the industry was becoming more and more concentrated, there was no similar development in the ranks of workers to match the power of employers. In England, the workers had secured many rights from their employers by their power of organization. In America, the workers were helpless and could not protect their interests.

in a depression. They looked to the state for protection. To complicate the situation further, the Wall Street had developed into a powerful influence controlling the destinies of industrial and other establishments. Banks in the United States issued new securities and controlled railways, industrial companies and insurance concerns. Thus industry was intimately bound up with banks and other financial interests. The organization of the New York stock exchange and its relations to the financial institutions were such that gambling and speculation in securities had become easy. Any disturbance on the stock exchange would have easily affected banks and industries and, therefore, the people. Thus the economic organization of the country was dangerously unstable.

② The second set of economic circumstances arose from the depression of 1929. Its roots lay in the post-war prosperity of the country and the fundamental changes in the economic organization stated above. During the Great War the United States became a creditor country instead of, as formerly, a debtor country. But this change came so suddenly that she failed to acquire the 'creditor complex', i.e., readiness to receive imported goods in payment for debt. The tariff wall also prevented the payment for her exports in terms of goods. No doubt for some time she lent the surplus balance to other countries, but this policy was not continued for long. The world's monetary gold, therefore, began to flow in the post-war years to the United States as the creditor country and to France as the recipient of reparation payments. Those countries which lost this gold had to deflate their currencies and consequently their price levels began to fall.

In the United States, however, for some years before the crisis of 1929 everything appeared to go well. Production outstripped all records. The an-

nual output of motor cars was nearly three millions and for every six Americans, men, women and children, white or black, there was a motor car in use. The unemployment of workers reached the lowest figure. Wages nominal as well as real increased. In the summer of 1929 prosperity reached its peak point. This prosperity bred unjustified hopes in the minds of people regarding the profits of industrial concerns. It led to excessive gambling on the stock exchange which was supported by banks and other financial institutions whose resources had increased abnormally because of the inflow of gold. Not only rich corporations in America lent money at high rates but money was borrowed from England at fairly high rates. The Reserve Banks found themselves unable to control the situation because their action came too late. Later on when the yield of securities was found to be not equal to the rates of interest paid on the capital borrowed for their purchase, heavy liquidation of security holdings started. Prices collapsed. The appearance of perpetual prosperity vanished and the country was thrown in the grip of a severe depression.

Main Features and Extent of the Crisis

One way of judging the extent of the depression is the resulting fall in the national income. No accurate statistics of the national income can be obtained because of the deficiencies in regard to component statistics and also because of the difficulties of deciding as to what should be included in national income. An estimate of it was however, prepared for 1929-32 by the National Bureau of Foreign and Domestic Commerce with the help of the National Bureau of Economic Research. According to this estimate the money incomes fell from \$ 81,040 millions in 1929 to \$ 48,952 millions in 1932. But the cost of living index fell during the same period by 20 per cent. and, therefore, partly compensated the fall in income.

The industrial production declined by 50 per cent; but in terms of gross returns the fall was nearly 60 per cent. The fall was the highest in the heavy construction industries like iron and steel and the industries producing durable consumption goods like motor cars. The fall in these cases was as high as 80 per cent. In 1932 the profits of heavy industries had fallen by 120 to 140 per cent. and thus they were actually running at a loss. The fall in the prices of industrial goods also was serious. The prices of capital goods declined by 70 to 80 per cent.; those of consumers' goods declined by 30 to 35 per cent. The wages of workers followed the same trend. In mining and manufacturing industries the pay-roll decline was 60 to 70 per cent.

The depression in industries affected the employment of workers. The increase in the number of the unemployed gives an indication of the severity of the depression. According to the A. F. L., the figures of the unemployed workers were as given below :—

Year	Unemployed workers
1930	3,947,000
1931	7,431,000
1932	11,489,000
1933	11,913,000

The unemployment figures given by the National Bureau of Economic Research show a more serious state of affairs. It reported the figure for 1932 as 14.4 millions. The plight of the American industry was desperate. The measure of the crisis in industry was provided by an article published in the *New Republic* on August 3, 1932, under the title 'Buy America for Five Billion Dollars'. What it meant to suggest was that the securities of the most important corporations which controlled the largest portion of American production had fallen so low that they could be bought

for a sum of five billion dollars which was not more than half the war debt of Britain.

The state of agriculture in this depression has been already discussed in a previous chapter. It would be sufficient to mention here that the decline in agricultural prices was nearly 60 per cent. by 1932 and that the net annual return to the average farm operator after paying expenses of production, interest, rent and taxes declined from \$ 847 in 1929 to \$ 342 in 1932. The farmers were also heavily in debt.

As a result of the decline of agriculture and industry, the financial structure of the country was so adversely affected that the people were faced with unbalanced budgets of the government, an unparalleled stock exchange collapse and a banking and credit crisis. During the years of depression the Federal budgets were unbalanced because tax receipts declined with the fall in prices and trade and because at the same time the government was called upon to spend for the relief of people. The history of the stock exchange needs no repetition. The market balloon which had gone higher and higher crashed and recrashed. But this collapse of the stock exchange knocked the bottom out of the credit structure of the country. The banks which were holding securities as collateral for speculative loans found the margins inadequate and were compelled to liquidate them. With this unloading of their security holdings, the prices of securities collapsed still further. The position of some of the smaller banks became very precarious with continuous fall of security prices and the inability of borrowers to repay loans. At such a time there started a panicky hoarding of currency. Withdrawals from banks increased. There was also a shifting of deposits from the countryside to New York. Nervousness of the depositors increased. Further withdrawal of deposits started. Banks, at least

the smaller ones, were unable to meet the situation because a large number of them were not members of the Federal Reserve Banks and could not expect any help from them. One after another they closed doors. The mortality was the highest among the non-member banks. Between 1930 and 1933 nearly 5000 banks failed.

Recovery Measures

When the depression set in in 1929, the Hoover administration in the beginning took the attitude that the depression would pass off if business men and industrialists did not lose their courage and continued to employ workers as before to avoid a fall in the purchasing power. The government exhorted them to stick to this policy. But when it was found that prices continued to fall and unemployment increased, the government decided to stabilise employment by spending more on public works. In 1931-32 the rate of expenditure of the Federal government on public works was nearly doubled. But with the fall in the tax-income of local bodies, their expenditure on public works had declined. The net result was that the total governmental expenditure on public works in 1932 was only two-thirds of what it was in 1929 in spite of the doubling of Federal expenditure. In the meanwhile the position of agriculture, industry and commerce deteriorated in a disquieting manner. Financial difficulties were great and many institutions were on the verge of bankruptcy. In February, 1932, therefore, the Reconstruction Finance Corporation was started to give financial aid to agriculture, banking, commerce and industry. In the first year of its working it lent nearly \$ 1000 millions to various institutions, mainly banks, trust companies and railways. The financial policy of the Federal Reserve Banks was also directed to pumping more credit into the financial system. The Hoover administration, however, failed

to remedy the situation. In February, 1933, the banking situation became more critical and by the beginning of March banks in nearly all the States were closed or were operating with restrictions. At such a time, President Roosevelt at the head of the Democratic party assumed power on March 4, 1933.

The Roosevelt administration immediately set itself to the task of saving the country from further disaster. The objects of the new administration were described by President Roosevelt himself in the following words : "Our task now is . . . the business of administering resources and plants already in hand, of seeking to re-establish foreign markets for our surplus production, of meeting the problem of under-consumption, or of adjusting production to consumption, of distributing wealth and products more equitably, of adapting existing economic organization to the service of people". That task was no doubt difficult but the administration decided to apply its mind to it and to secure the necessary legislative powers, a special session of the Congress was held on the 9th March and it lasted till 16th June. Legislation was enacted in quick succession on every phase of financial, economic and social life in the United States. The laws passed fall into two categories: the first comprised of legislation relating to the immediate and urgent problems ; the second consisted of laws, stated in the words of the President himself, "to build . . . a more lasting prosperity". The two categories have been described by the titles 'Relief and Recovery' and 'Reform and Reconstruction'. The Roosevelt policies contained in these laws have come to be known as the New Deal. The number of laws passed and their provisions would fill scores of pages if described in details. For want of space it is proposed to give them here only in their outline.

When the administration assumed power the pro-

blem of giving relief to the distressed people was very urgent. Of the total normal occupied population of 49,500,000 nearly 14 millions were unemployed. Even those who were in jobs were working only part time. In 1933 nearly 52 per cent. of 13,349 establishments which supplied information, were working part time. The average reduction in hours of work was about 28 per cent. The Unemployment Relief Act of March 31 1933, therefore, authorised the President to employ the unemployed on public works, to provide them with housing and to furnish them with such subsistence clothing, medical attendance, hospital care and cash allowance as might be necessary. Further by the Federal Emergency Relief Act of May 12, 1933 a Federal Emergency Relief Administration was created under the supervision of a Relief Administration and was empowered to make grants to States for the relief of the unemployed. By the National Employment Service Act of June 6, 1933 a national system of public employment offices to be operated by the Federal government in co-operation with the States was inaugurated. In addition to these Acts the programme of work creation contained in the NIRA was expected to aid the solution of the unemployment problem. A number of government bodies were established to give effect to the provisions of the above Acts such as the Federal Administration of Public Works (PWA), the Civilian Conservation Corps (CCC) and the Federal Civil Works Administration (CWA).

Though substantial results were achieved by the relief measures, many defects were noticed in the administration of such temporary laws. No permanent improvement in the unemployment position was also expected and, therefore, a demand was made for a permanent legislation introducing an insurance scheme. Government responded by enacting the Social Security Act of 1935. The main provisions of

this Act are : (1) direct Federal grants to States in aid of maternity and child welfare, provision for the blind, vocational rehabilitation of the physically disabled and the establishment and maintenance of public health services (although the measure did not make any provision for the introduction of a health insurance scheme), (2) grants to States which would introduce old-age insurance scheme approved by the Social Security Board appointed under the Act ; such grants would amount to fifty per cent. of the monthly allowances with a limit of \$ 15 per individual ; the age-limit for such a pension was not to be more than 65 before 1940, after which it might be extended to 70 ; (3) a system of Federal old-age annuities by which qualified persons on attaining the age of 65 after 1st January, 1942 were to be paid a pension upto a maximum of \$ 85 a month ; the funds necessary for the purpose were to be raised by the imposition of a federal excise tax on the wages of workers of certain categories ; the tax was to be paid in equal proportions by employers and workers ; it was expected that this scheme would supersede the States schemes ; and (4) the establishment of contributory unemployment insurance schemes to be managed by States ; the funds necessary for the purpose were to be collected by imposing a Federal tax on all employers of eight or more workers on their pay-rolls ; the tax was to be 1 p.c. in 1936, 2 p.c. in 1937 and 3 p.c. in 1938 and thereafter. After certain conditions were fulfilled by States, 90 per cent. of the employers' tax was to be credited to them. By 1935 only 37 States had old-age pension laws ; of these only 16 had met the requirements of the Act and six had laid down no definite date for the enforcement of their laws. Only 8 states had enacted unemployment legislation. The initial opposition of States to these schemes was, however, being gradually overcome. The World Economic Survey for 1938-39 says : The

Social Security Scheme in the United States has developed in a number of ways: Unemployment benefits were being paid in most States in 1938, and will be paid in all States and territories of the Union before the end of 1939; a special Act for unemployment insurance of railway workers has been passed; and it has been officially proposed that insurance for old-age pensions should be extended to farm workers, domestic servants, seamen and other groups which have so far not been covered. ^{**}

The direct attack of Roosevelt administration on the depression has attracted more attention inside and outside the United States and has aroused the greatest storm of criticism against the New Deal. The recovery programme drawn up to attack the depression consisted of industrial, agrarian and monetary legislation. In the industrial field, the most important and outstanding Act was the National Industrial Recovery Act of June 16th, 1933. Considered from a wide angle, it was a measure which aimed at relief, recovery, reform and perhaps reconstruction also. But considered from a narrow angle, it was meant to reduce unemployment by stimulating activity in the industries producing consumers' goods. It was intended to attain this aim by reducing the hours of work and fixing minimum wage-rates. These steps in their turn, it was expected, would increase purchasing power and create more employment.

The main provisions of the NIRA were: (1) the framing of codes of fair competition by trade associations or groups of employers in each industry and their approval by the President; codes were not to be designed in a manner likely to create monopolies or to oppress or eliminate small enterprises; (2) where

* The World Economic Survey, (League of Nations) 1938-39,

such codes were not submitted, the President was given power to impose them on industries ; (3) the President was given power to license business ; failure to comply with code regulations was to be penalised by the withdrawal of licenses and hence the permission to engage in interstate commerce ; (4) when codes were accepted, the industries concerned were to be freed from anti-trust laws ; (5) trade unionism and collective bargaining were permitted to work ; (6) the President was given power to prescribe maximum hours and minimum wages ; (7) to protect industries working under codes from unfair competition from foreign countries, the President was authorised to raise tariff or prohibit the import of goods concerned ; and finally, (8) until the adoption of codes by all industries was complete, the President was given power to protect the interests of industries which had adopted codes from those which had not during the transitional period. The task of carrying out the provisions of the Act was left to the National Recovery Administration and its head the Administrator.

In a short time, 96 per cent. of the employers signed the codes. Nearly 500 such codes were formed. The average hours of work were fixed between 35 to 40 per week ; the wages for manual workers varied between 30 to 40 cents per hour. Child labour under sixteen years was abolished and in some dangerous trades the minimum age limit was raised to 17 or 18 years.

The immediate effects of the NIRA appeared to be good. In 1933 employment increased by 37 per cent. and wages by 25 per cent. The industrial production also showed substantial rise. But thereafter periods of recovery and recession alternated. Even if it is granted that there was recovery, to what extent it was due to the NIRA could not be proved because there were other measures in the financial field which

were working towards the same end. It must be, however, admitted that the psychological effect of the NIRA was good in that it engendered in the people hope for recovery and turned their attention away from pessimism bred by the depression. But in 1935, the Supreme Court declared the Act unconstitutional in a case against a New York firm and, therefore, the administration set up to enforce it had to be disbanded.

But when the NIRA was declared unconstitutional, the clauses relating to collective bargaining and trade unions were rendered null and void. This was a great blow to the rights of labour. But immediately another legislation was put through the Congress and was known as the Wagner Act of 1935. It restored to workers the rights conferred by the NIRA. This Act received the approval of the Supreme Court on April 12, 1937.

As far as the agricultural measures are concerned, they have been discussed in connection with the stabilisation of agriculture in chapter XI. It would be sufficient to mention here that the most important measure enacted by the Roosevelt administration for raising prices was the Agricultural Adjustment Act of 1933. Like the NIRA, it was also declared unconstitutional by the Supreme Court in January, 1936 and, therefore, the organizations created to enforce it had to be disbanded. All the same, as said before, considerable results were achieved by the agricultural policies so long as they were in force.

The object of the monetary policy of the Roosevelt administration contained in a number of orders and laws passed in the years 1933-35 was to bring about a rise in prices by increasing the amount of credit and currency and by depreciating the dollar. As the currency panic of March, 1933 had led to a contraction of the volume of the means of payment, on April 5, 1933, the President passed an order forbidding hoarding of

gold ; it was followed by an embargo on gold exports and the abandonment of the gold standard on April 20, 1933. The consequent fall in the value of dollar and the rise of the price of gold raised an interesting question regarding certain types of contracts. One of the terms of bonds, mortgages and other obligations in the United States was that their principal and interest should be paid in dollars of certain gold content, viz., 25.8 grains gold nine-tenths fine. If this clause was allowed to operate, with the rise in the price of gold, the total amount of all debt would have increased proportionately to the rise in the price of gold. On June 5, 1933, a resolution was passed by the Congress by which the gold-clause was made inoperative and debts were allowed to be paid in terms of any legal tender. It was, however, thought that the mere leaving of the gold standard might not help to raise prices and, therefore, the President was given more powers necessary for taking measures for raising prices by passing what is known as the Thomas Amendment to the AAA. By its terms the President was empowered to : (1) arrange for the purchase of \$ 3000 million worth government securities through the Federal Reserve Banks to bring about expansion of credit ; (2) issue upto \$ 3000 million worth treasury notes ; and (3) reduce the gold content of the dollar by not more than 50 per cent. He was also authorised to fix a definite ratio between gold and silver, to provide for unlimited coinage of silver and to accept war-debt payments in silver upto \$ 200 millions at a price of 50 cents an ounce.

As a result of the abandonment of the gold standard and the policy of inflation followed by the Reserve Banks there was a temporary fall in the value of the dollar and a recovery in prices and production. The index number of prices rose from 61 (1929 = 100) in March, 1933, to 70 in July 1933 ; the index of produc-

tion also rose from 60 to 100. But this improvement was short-lived. After July prices failed to rise and the dollar contrary to expectation, began to appreciate in exchange value. On October 22, 1933, therefore, a new gold policy was announced by which gold was to be purchased in the international markets at a price higher than the ruling price. By this step the exchange value of the dollar was to be forced down. This policy did not result in any substantial rise in the general price level and, therefore, was later abandoned.

In 1934, the government again adopted a policy of expanding internal credit and forcing it into active use. By the Gold Reserve Act of January, 1934, all gold stocks of the country were ordered to be delivered to the Treasury and in return its holders were given gold certificates. By an executive order, two days afterwards, the gold content of the dollar was reduced to 59.06 of its former value. Out of the profits arising from the revaluation of gold on the new basis, a fund to stabilize the dollar exchange was created. It was expected that the devaluation of the dollar and the dishoarding of gold would help to raise prices. After dealing with the gold problem in the above manner, the government turned its attention to the silver problem. By the Silver Purchase Act of 1934, the Treasury was ordered to purchase silver at a substantially higher price until the monetary reserves of the country of gold and silver were in the proportion of three to one. The gold and silver policies of 1934 were directed to raise the purchasing power in the hands of the people. In 1935 the *de facto* stabilization of dollar was having its effect on capital which had fled the country and which again returned in large amounts. The price level also showed appreciable rise.

The monetary policies of President Roosevelt

have been criticised on many sides. It was suggested that credit expansion was an impracticable method for permanent recovery. But the critics fail to realise that it is the monetary policy in many countries which has been able to bring about a substantial rise in the general price level. After trying other methods, President Roosevelt had no other alternative left but to resort to controlled inflation. Controlled inflation, now called reflation, cannot be regarded as unwise if it could break the vicious circle of depression.

Measures discussed so far related to Relief and Recovery. But as stated before, reconstruction of the economic organization of the country was also an urgent problem. The United States have been described as "a country with twentieth century equipment and a mid-nineteenth century socio-legal framework". When the weakness of the country's economic structure was seen in the years of the crisis, a demand was made for the reform of the banking system and the stock exchange among other institutions. The Banking Act of 1933 was passed to "provide a safer and more effective use of the assets of banks, to regulate interbank control, to prevent undue diversion of funds into speculative operations and for other purposes". With these aims, the Act separated deposit from investment banking, prohibited the payment of interest upon demand deposits and gave greater powers to the Federal Reserve Board to control speculative loans by member banks. Further a Federal Deposit Insurance Corporation was organized and all national banks were compelled to subscribe to the scheme. From June 1, 1934, deposits upto \$ 10,000 were fully insured; amounts from \$ 10,000 to \$ 50,000 were insured upto 75 per cent. All amounts above \$ 50,000 were insured upto 50 per cent. This scheme proved helpful in restoring confidence of depositors in banks. The reform of banking initiated in 1933 was

continued further by the Banking Act of 1935. It made the Federal Deposit Insurance Corporation permanent, and extended the powers of the Federal Reserve Board over member banks, and finally made certain changes in the Federal Reserve System itself.

The Securities Act of 1933 was passed to protect investors by compelling corporations to disclose the full nature of their securities. Stringent conditions also were laid down regarding the issue of new securities. In 1934 the Securities Exchange Act was passed to lay down rules for the conduct of stock exchanges and to forbid a number of speculative practices. To administer both the Acts, a Securities and Exchange Commission was established with necessary powers.

Another reform measure was the Robinson-Patman Act of 1936 which amended section two of the Clayton Act to prohibit more strictly discrimination in prices by means of giving special discounts and allowances. These devices were being used by corporations to circumvent the anti-trust legislation and provisions against unfair practices. It has been already mentioned that by the Wagner Act of 1936, labour organizations and collective bargaining have been permitted. This was a reform long overdue. The transport and communications system was also reformed by the Emergency Railroad Transportation Act of 1933. By this Act wide powers were given to the Federal Co-ordinator to promote economical working, to bring about financial reorganization, to make possible reduced charges to the public and to improve conditions generally.

The Measure of Recovery

President Roosevelt was re-elected in November, 1936 for another period. By that time American recovery was well on its way. The following Federal Reserve Board index will show the measure of recovery :

(Base 1923-25=100; adjusted for seasonal variation)

Aug. 1934 Aug. 1935 Aug. 1936

Industrial production	73	87	107
Construction contracts	27	38	65
Factory Employment	79.3	81.8	88.6
Factory Payrolls	62.2	69.1	81.0
Price Index			
All commodities	76.4	80.5	86.6
Farm products	69.8	79.3	83.6
Foods	73.9	79.9	83.1
All except farm products and foods	78.3	77.9	79.7

The above indices of industrial production and prices show that the economic position in the United States definitely improved as compared to the depths of the depression in 1932. Recovery was not, however, continuous but proceeded in a series of cyclical waves consisting of periods of rise and fall. Even as regards demand, it appeared gradually and for different types of goods at different periods. First there was an improvement in the stock market; then the demand for consumers' goods appeared; and finally the demand for durable and semi-durable goods made itself felt.

In the meanwhile the world economic conditions also showed recovery. Thus in 1936 the international trade was only $7\frac{1}{2}$ points below the level of 1929. The question, therefore, arises as to how much of the American recovery was due to the New Deal policies and how much to the world recovery. It is difficult to separate the effects of the two factors because the economy of no country to-day is shut out completely to outside influences. But the world recovery in itself was largely due to the armament programmes of many countries. It, therefore, follows that if American recovery is due to world recovery, it is doubtful as to whether it will be lasting. All the same, it cannot

we denied that the Federal disbursements for relief and the reflation programme to bring about credit expansion and cheap money conditions aided the recovery attained in the United States.

But in appreciating recovery, its other side should not be lost sight of. The cost of the New Deal programmes had been very great. The national debt of the country which was \$19,500,000,000 in 1933 mounted up to \$36,000,000,000 in 1937. This huge national debt itself may create a serious problem for the government and the industry in future. Another point which requires to be stressed is about unemployment. In spite of a rise in production and prices, the number of the unemployed remained disquietingly high. It was still in the neighbourhood of ten millions. Consequently the government expenditure on relief was still substantial.

The New Deal policies of President Roosevelt, therefore, have aroused a great deal of conflicting criticism in the world. Though his financial policies were able to bring about a rise in prices and reconstruction of the banking system, they failed to stimulate investment. This was largely due to lack of confidence of the public about the future, the shape of which depended on the reforming zeal of President Roosevelt. His attempt to plan industry under the NIRA by forming Codes of fair competition resulted in putting up prices without bringing about a proportionate rise in employment and production. The AAA designed to plan agriculture also created an interesting situation. When thousands of people were unemployed and were short of food, the agricultural policy aimed at destruction of growing crops or reduction of production. The critics, therefore, suggest that President Roosevelt failed to tackle the fundamental defects of American economy and that he met with the symptoms of the depression.

malady. Doubts, therefore, have been expressed about the lasting nature of American recovery. "Nowhere else has there been such popular enthusiasm behind a government as President Roosevelt enjoyed when he arrived at the White House and yet, in no other country has there been so little progress towards recovery. Economic ills, like other maladies, are not cured solely by good intentions; nor is it the most spectacular remedy, or the one which seems to get to the point most quickly, that is most likely to prove successful. Much of President Roosevelt's economic policy has been like the work of a man who thinks that the most obvious treatment for a patient suffering from high fever is to put him into the refrigerator. N. I. R. A., A.A.A., the reduction of hours, the attempt to raise prices and wages—most of his work has been attacking the symptoms of maladjustment, rather than its fundamental causes, and it is not surprising that well-meant and spectacular as these measures have been, they have not contributed much towards solving the real problems.*

The Newest Deal

As far as the second period of Roosevelt's presidency is concerned, the world conditions were changing fast, and the United States was no doubt affected by them. President Roosevelt however had not given up his idea of leading the country to a lasting prosperity as can be inferred from his reference to the Newest Deal in his message to the Congress. He urged the Congress to undertake a six years' plan for the orderly development of the country and, to spend for it a sum of \$ 5000 millions. He was also bent on further reform programme, particularly the reform of the judiciary which had proved to be a

* Lewis, Economic Problems To-day, pp. 171-72.

great obstacle in the recovery measures of the previous period.

In the years leading to the present war, the recovery in the United States received a sharp setback in August 1937. The recession continued up to January 1938 after which again conditions improved. The index of capital goods production declined from 99 in May 1937 to 42 in May 1938 and then recovered to 75 in December 1938. The fall in the production of consumers' goods was not so serious. Its index declined from 100 in May 1937 to 88 in May 1938 and thereafter it improved to 97 in December 1938. The agricultural production, however, was well maintained. The unemployment figure still remained disquietingly high.

Of the legislative measures enacted before the present war started, two are most important. The Farm Act of February, 1938, has been already discussed in chapter XI. It was intended to restrict crops and raise prices of agricultural goods. It was an attempt to revive the principles of the AAA which was declared unconstitutional by the Supreme Court. By the Wages and Hours Act, otherwise known as the Fair Standards Act, of 1938 an attempt was again made to revive the NRA principles to reduce hours of work and to raise wages. The maximum hours of work were to be reduced, it provided, from 44 hours a week in October, 1938 to 40 hours a week in October, 1940 for workers engaged in interstate commerce or in the production of goods entering interstate commerce. The Act also laid down a schedule of minimum wages. The ultimate standard was to be 40 cents an hour for a 40 hours week. But wages were to be raised gradually as follows: 25 cents an hour in the first year of the Act; 30 cents an hour for the next six years; thereafter (i.e., after 1945) the rate was to be 40 cents an hour. Overtime wages were to

~~be paid at a rate 50 p.c. greater than the normal wage~~
~~rate. Approximately 11,000,000 persons were likely~~
~~to be covered by this Act. The 25 cents an hour rate~~
~~was already enforced in October, 1938. The value of~~
~~this measure will depend on its effect on the unem-~~
~~ployment situation.~~

PART III

Germany

Chapter XV

ECONOMIC DEVELOPMENT BEFORE 1870

At the beginning of the nineteenth century Germany was a mere geographical expression. She was made up of 360 states which together were nominally called the German Empire but actually constituted a federation. The number was reduced to 38 at the Vienna Congress of 1815. Even then it was too large. It was not merely the existence of a large number of states that arrested the growth of the country as their divergent policies and currency and legal systems. There was no uniformity in currency, weights and measures, taxation or laws. Each state had its own tariff system and some of them even had internal tariff and transit duties. Prussia which was the biggest state had sixty different tariffs operating within her borders. Germany, therefore, as a nation did not exist. The first step in the direction of uniting these states economically was taken in 1834 when the first German Zollverein was formed by the majority of states agreeing to a common customs boundary under the leadership of Prussia. Complete unity, however, was not attained till 1871 when the German Empire was founded.

Agriculture was the predominant occupation of the people at the opening of the nineteenth century. Most of the people lived in villages. In Prussia, the biggest state, three out of four persons were agriculturists. If the population living in towns which was partly dependent on agriculture was added the percentage of agricultural population was as high as eighty. Conditions in other states were not very much different. The organization of agriculture was primitive. Land was not enclosed; the three-field system of cultivation with winter grain, summer grain and fallow was common. As noticed in the case of England, the open-field and three-field systems of agriculture resulted in agriculture becoming stagnant. In fact, they led to deterioration of soil and, therefore, of the yield.

But the greatest handicap to progress was the existence of serfdom. Its influence, however, varied from region to region. In the northwest serfdom never took deep roots and before the Middle Ages were over, it disappeared. In the southwest it vanished more slowly; by commutation of services serfs were gradually freed and by the middle of the eighteenth century it had nearly disappeared. In the east of the Elb, however, conditions were different. Land in this region was conquered by the Germans and, therefore, was held in large parcels by lords on the manorial system. The size of farms was generally large and the lord required the services of his tenants for the cultivation of his own holding. The remaining land was held by tenants under different tenures. Most of them required that the peasants should render personal services to the lord. Serfdom in this region, therefore, reduced peasants to the position of virtual slaves. The landlord, vulgarly called the Junker, constantly made an attempt to increase his holding by the dispossession of small peasants.

Frederick the Great of Prussia had begun the work of emancipating the serfs in Prussia by setting an example to others by freeing those serfs who worked on his own estate. But the progress was very slow and was halted after his death in 1786. Twenty years afterwards when Prussia was defeated by Napoleon in the battle of Jena, to regain the lost prestige, far-reaching political and economic changes were introduced in the country under the guidance of Stein and Hardenberg. In October, 1808, Stein passed a decree, known as the Edict of Emancipation, which provided for : (1) the abolition of serfdom from the whole of Prussia after October, 1810 ; (2) the removal of all restrictions on landholding, and buying, leasing and selling land which were intended in the past to protect the power of the lords ; and (3) the fusion of classes by laying down that nobles may engage themselves in citizen occupations and that citizens also may take to agriculture. The reform thus initiated by Stein was carried forward by Hardenberg, his successor, by embodying in a law of September, 1811, provisions giving peasants complete possession of their farms held by them under different tenures from the lord.

Thus the emancipation of serfs which was a condition necessary for the progress of agriculture was achieved, at least as far as the law was concerned, in the beginning of the nineteenth century. Its effects, however, were different in different regions. In Prussia, though serfs were freed by law, the complete destruction of serfdom could not be achieved immediately because of the backwardness of peasants and the opposition of the Junkers. Through their political influence they contrived to see that their interests did not suffer very much. Thus though permanent rights were conferred on peasants by the law of 1811, as a concession to the agitation of the Junkers, it divided

the peasants into two classes, the one consisting of farmers who held land by inheritable rights and the other of farmers, who could not prove any such title to the land held and ordered that the peasants from the former class should give one-third and from the latter one-half of their land to the lord in lieu of the personal services which they owed him formerly. In any case by giving land they could free themselves from the abject slavery to the lord. In 1816, however, a further reactionary step was taken when by a royal decree the application of the principle of the law of 1811 was restricted to the farmers in the former class only. Others were made subject to the old laws and could be called upon to give personal services. Taking advantage of the weakness of peasants in the second class, the landlord bought over their interests. The declaration of 1816 continued in force upto 1850 and, therefore, for over thirty years the land was reorganized according to its provisions. By the middle of the century, the small peasants were reduced to the position of landless labourers. The size of estates also increased by the absorption of their land. Thus in Prussia there came into existence two main classes in agriculture, the one of landlords and the other of agricultural workers.

In the southwest and northwest, however, the early emancipation of serfs had led to the establishment of small peasants on land. Thus in the southwest in the state of Wurtemberg, about 1880 out of 440,000 landowners, nearly 280,000 were small peasants, with holdings of less than five acres. The percentage of holdings over 250 acres was hardly 2.5 of the total. Similar conditions prevailed in Baden, Bavaria and the Rhenish provinces of Prussia. In all of them not more than 3 per cent. of land was held in large estates of more than 250 acres. In the northwest, small holdings characterised the agricultural

organization since long. Thus the emancipation of serfs was achieved in Germany in the nineteenth century, much later than in England, and became one of the factors responsible for the later progress of agriculture.

In the half a century preceding the formation of the German Empire, agriculture made substantial progress. The credit for the introduction of improved methods goes to one Albrecht Thaer who published two important books advocating reform on English lines. His first book was published in 1789 under the title—Introduction to the Knowledge of English Agriculture. He wrote his still greater work—the Principles of Rational Agriculture—between 1809 and 1812. Improvements in agriculture along the suggested lines came after the Napoleonic wars were over. The rotation of crops was changed and improved implements were introduced. The knowledge of agricultural chemistry connected with the name of Justus von Liebig was applied to agricultural processes with a view to increase the yield of land. The progress, however, was more remarkable in the east than in the west. The landlords in the east had greater intelligence and capital which could be applied to introducing improvements. The size of the holding also was favourable. The Prussian government also took keen interest in improvements and aided them by the dissemination of scientific knowledge. It helped agricultural education by establishing colleges. Cattle shows and exhibitions of implements were held regularly after 1835. In the southwest and northwest progress was very slow and if the farmer's position improved it was largely due to the improvement in communications after 1830. On the whole German agriculture showed conspicuous progress before 1870. Clive Day has summed up the progress by saying that "Between 1800 and 1870 the yield per acre of rye, barley, and

oats is estimated to have doubled, that of wheat to have increased by half. The productive area grew by the reduction of fallow, and taking into account both factors, the increase of area and the increased yield per unit of area, it is estimated that the product of German agriculture doubled and possibly tripled in the course of the nineteenth century."*

Like agriculture, industry was also in a backward state at the opening of the nineteenth century. The influence of the gild system was still strong and an artisan was prohibited from carrying on a trade in the countryside without first having gone through gild apprenticeship. He was required to enter first a gild in town and go through the prescribed number of years of training according to its rules before he could establish as an independent master craftsman. The system of gilds was no doubt weakened by the Prussian reforms after 1806. By the instructions of 1808, by the edict of 1810 and by a statute of 1811, the monopoly and privileges of gilds were substantially reduced but the gild system was not entirely abolished. The liberal attitude of Prussia was copied by the other states of Germany. In 1845 Prussia introduced a further measure of industrial freedom, but after the panic of 1846-47, in 1848 a reactionary step was taken which amounted to reintroduction of the gild system. Fortunately for Germany this law was not strictly enforced and, therefore, the factory industry which had just made a beginning could make progress. In the decade preceding the Franco-German War, industrial freedom was completely established in Germany and the last vestiges of the gild system were swept away. The continuance of the gild system in the first half of the nineteenth century was a great obstacle to the development of modern industry. If Prussia

* Clive Day, *Economic Development of Modern Europe* p. 26.

had not given lead in doing away with it, the development of modern industry would have been impeded for still many more years.

There were other additional factors responsible for the slow progress of industries in Germany. The attachment of the German people to agriculture was so great that little attention was given by them to the adoption of new industrial technique. In Prussia even as late as 1871, the percentage of population dependent on agriculture was as high as 65.5. The poverty of the people must also be reckoned with as another cause. This with the devastating effects of wars had made accumulation of capital difficult. Banking facilities of the country were also poor. The modern joint stock banking development started in the second half of the nineteenth century and facilitated the establishment of modern industries requiring a great amount of capital in a mobile form. Germany was also politically divided and, as said before, each state had its own currency, laws and customs tariff. Until economic unity was achieved no progress was possible. It was also true according to the principle enunciated by Adam Smith that "the division of labour is limited by the extent of the market", that the progress of German industries was checked by the lack of adequate markets. The home market was limited because of the poverty of the people, the customs barriers and the lack of communications. Germany could not also hope to export goods on a large scale because she like England neither possessed a colonial empire nor an efficient mercantile marine. In addition, England which had an earlier start was a serious competitor. Thus for a variety of reasons Germany's industrial progress before 1834 was very slow. In that year the Zollverein was formed and for the purposes of trade Germany was unified for the first time. This economic unification also coin-

cided with the improvement of communications. The industrial progress, therefore, began about 1840, but became more marked after 1850. The rise of Germany, however, as a first rate industrial country came after 1871.

In the beginning of the nineteenth century, German industries consisted of many handicrafts and mining. With considerable iron resources in the country the iron industry, though primitive in form, was long established. There were small iron smelting furnaces situated in forests where iron was smelted with the use of charcoal. Some of them, of course, were quite large and progressive. Thus a mine in Upper Silesia had in 1800 six water wheels furnishing power necessary for running blast furnaces. Spinning and weaving also gave occupation to a large number of people. Many of them, however, practised it as a spare-time occupation. Under the influence of the Mercantilist doctrine, the state governments gave encouragement to industry because of the belief that either by exporting more to foreign countries or by importing less from them or by satisfying home demand by the products of home industries the country would be a gainer. The restrictionist policy of one and all the states was influenced by this belief. So also to encourage home industries by the introduction of devices perfected in other countries, in 1821 the Prussian government organized the Gewerbe Institute (Trades Institute) which marked the beginning of a new era in industrial technique.

Though there were a few crude factories in the beginning of the nineteenth century, the real development of factory, as said before, came after 1840. Among the factories existing before, there were a few beet-sugar factories and spinning mills established during the years of the continental blockade. The beginning of factory age after 1840 was no doubt

facilitated by the comparative peaceful times enjoyed by the people and the general prosperity of the country. The internal economic unity which was begun by the Zollverein of 1834 was nearly completed by 1852 when except Austria all other states had joined the customs union. The consequent removal of tariff barriers and the simultaneous development of communications widened the home market and offered the basis for the establishment of large scale factories. English technicians were engaged and English machines were imported to set up cotton, woollen and silk mills. The iron industry also changed rapidly and coke instead of charcoal began to be used in the smelting of iron.

The main industrial progress of this period was in the textile and iron industries. The average consumption of cotton in the whole of Germany during the years 1836-40 was estimated to be 18.5 million pounds ; it increased to 56.1 million pounds in 1851-55, and 97.5 million pounds in 1861-65 ; just before the Franco-German war its total consumption was in the neighbourhood of 100 million pounds. About this time industry had reached such a stage of efficiency that England began to complain of its competition. The development of the other branches of the textile industry, woollen, linen and silk, was equally remarkable. The iron industry, as mentioned before, was long established in Germany but until the middle of the century its progress was slow. In 1847 in Prussia only 32 out of 247 blast furnaces used coke. But after this year its progress was rapid. By 1870 Germany surpassed Belgium and France in the production of iron. One of the usual methods of judging a country's industrial progress on the modern lines is to measure the increase in the consumption of iron. By this test the progress of Germany was considerable. The following figures show the increase in the per capita

consumption of iron in Germany as compared with the U. S. A. and England :

(In kilograms.)

	1850	1860	1870
Germany	11	19	38
U. S. A.	30	31	51
England	80	122	173

The means of transport in Germany before 1800 were very poor. There were no good roads connecting the various parts of the country. There were a few roads no doubt but they were built for military purposes. They resembled the king's highways in England in the medieval period with badly constructed bridges facilitating the crossing of rivers. Even the powerful state like Prussia did not possess a good road system for various reasons. Her finances were depleted by the Napoleonic wars ; even if they were available, road construction was difficult because of the political differences and the lack of a good road metal.

The road construction in Prussia started after 1815 when she acquired the Rhenish and Westphalian provinces from France when peace was concluded. Napoleon was a good road builder and when these provinces were annexed, their roads supplied the model for the construction of roads and Prussia increased her road activity. The following figures show the progress of Prussian roads in the next quarter of a century :

Road Mileage

(1 Prussian mile = nearly 5 English miles.)

	Total	In Rhineland	In Westphalia
1815	419.8	147.2	91.5
1826	668.5	186.0	160.0
1831	902.0	200.4	160.6
1841	1280.1	261.1	207.7

The above figures show how road development outside the two provinces was very limited at the time they were incorporated into Prussia. Thereafter road construction was extended mainly to central and western parts of Prussia. Prussia, however, gave increased attention to road construction after 1845, though as railway construction proceeded rapidly road construction received less and less attention. The roads in other parts of Germany developed after 1850.

The internal waterways of Germany mainly consisted of navigable rivers before the Empire was founded. Canal construction received attention, unlike other countries, very late. The era of artificial waterways started after 1830. Germany, however, has been fortunate in possessing an extensive river system. There are six major streams—Rhine, Elb, Weser, Oder, Vistula and Danube. Minor streams useful as waterways are the Ems, Havel, Spree, Saale, Main, Neckar and Memel. The total length of navigable rivers and lakes is approximately 6000 miles. These rivers were the chief means of transport for goods until the railways came. But their utility was reduced because of the political differences. When the Zollverein was formed, they began to be used across the frontiers of many states. Steam boats were also introduced which carried larger cargoes. But the spread of a railway network after 1835 affected the importance of both roads as well as waterways.

The first railway line in Germany was built between Nuremberg and Furth in 1835. It was followed by another between Leipzig and Dresden in 1839. But the railway construction of this period lacked any plan as each state was free to build railways as it liked. Hence earlier lines were designed to serve local interests. Rates and fares also were different in different states. Thus there was a good deal of rivalry among these railway lines.

The lead in consciously planning a railway system was again given by Prussia. She followed a system of encouraging private railway construction by giving direct assistance which consisted of either a purchase of shares or guarantee of interest. When the position of the government finances became favourable after 1842, it also planned state lines. The railway mileage increased from 500 in 1844 to 3,500 in 1860. Between 1862 and 1866, the government was in need of money to finance the wars with Denmark and Austria and, therefore, Bismarck again granted concessions to private companies very freely. The result of this policy was that before the Empire the railway system of Prussia became very complicated. There were state-built lines, state-subsidised lines, state-managed lines and private lines. In 1866 the total mileage was 5,900.

As regards other states Bavaria started with the policy of encouraging private lines, but as the progress was very slow, after 1844 it took upon herself the construction of railways. Wurtemberg also decided upon state action in 1845. Baden followed the same example. Thus in other states, railway construction was undertaken either on state or private account. As a result of railway construction in this period Germany possessed about 12,000 miles of railways in 1870.

The development of railways in Germany speeded up economic progress. The prosperity of German agriculture and industry after 1850 was no doubt helped by the new means of transport. They were all the more important because the road system of the country was still imperfect. The role which the German railways played in her economic development in the middle of the nineteenth century has been described by Treitschke in the following words. "It was the German railways which first dragged the nation from its economic stagnation; they ended what

the Zollverein had only started; with such power did they break in upon all the old habits of life, that already in forties the aspect of Germany was completely changed.... In this peaceful contest she was far ahead of all continental nations, with the sole exception of Belgium, ahead both of centralised France and wealthy Holland."

The German mercantile marine held a very insignificant position in this period. Most of the ships were wooden sailing ships. Moreover in the beginning of the nineteenth century, the German ship-building industry declined because of the shortage of timber. With the construction of iron ships the ship-building activity showed some revival, but at the time of the Franco-German war, the tonnage registered in Germany was hardly 95,000 as against 5,610,000 of England and 1,070,000 of France.

The Zollverein

Of all the problems that faced Germany in the early nineteenth century, the one that was most perplexing was that of customs. The growth of German commerce was hindered by the existence of as many tariff systems as the number of states. All of them imposed protective duties, not only on imports from foreign countries but even on inter-state imports. Some of the states had in addition internal tariffs. With these restrictions the normal expansion of trade, internal as well as external, was checked and this had a profound effect on the agricultural and industrial growth of the country.

After the defeat of Prussia in 1806, as said before, the reorganization of the country's political and social institutions was effected. At the Congress of Vienna in 1815 the number of states was reduced to thirty eight. Consequently the number of tariff systems was also reduced. But even then the existence of thirty-eight systems was very annoying and led Fre-

derick List to condemn it in the following words expressed from disgust: "Thirty-eight tariff walls impede internal commerce and have much the same effect as if every limb of the human body were tied up so that the blood could not circulate. To go from Hamburg to Austria, from Berlin to Switzerland, ten states must be traversed, ten tariffs studied, ten customs duties paid... Most discouraging is this state of things for men who want to work and trade. With envious eyes they gaze across the Rhine where a great nation can trade freely from the Rhine to the Pyrenees, from the Dutch frontiers to Italy without meeting with a single customs-house officer." *

Under the influence of Stein and Hardenberg who believed in free trade theoretically, Prussia became gradually inclined towards free trade. Accordingly some changes were made in tariff in 1810. But the urge for further liberalisation came after 1815. Her export trade in grain suffered a decline as a result of the imposition of Corn Law duties in England; and the competition of English fabrics was also driving out her linens from foreign markets. She was, therefore, in need of alternative markets. Further she was convinced that the large smuggling trade could not be stopped so long as customs duties remained prohibitively high. The unification of all states was worth trying for to increase the home market and to retaliate against foreigners, but it was immediately unattainable because all the states had not reached the same stage of economic development and because some of them like Hanover were under foreign powers. She, therefore, decided to begin unification of the states under Prussian influence. Frederick William III, with the guidance of Count von Bulow, the finance minister, passed a law in May, 1818 by which: (1)

* Birnie, *An Economic History of Europe*, p. 72.

all internal tariffs were abolished ; (2) raw materials were placed on the free list ; (3) a duty of ten per cent. was placed on the imports of manufactures : and finally (4) all prohibitions except on salt and playing cards which were the monopolies of the state were abolished. Thus the lead in the unification movement and liberalisation of trade was given by Prussia and she, therefore, qualified herself to be the leader of whole German Empire. The Prussian tariff of 1818 was probably the most liberal in the whole Europe.

After her first success Prussia pursued a policy of extending the boundaries of the Union by bullying some and cajoling others ; the states encircled by her (enclaves) were forced into agreement with her. By 1826 all the states in the North entered the Prussian Union and, therefore, a customs union of the North became an accomplished fact. In the meanwhile, other states realising the advantages of a customs union were negotiating for suitable agreements among themselves. A Southern Union was formed between Bavaria and Wurtemburg in 1825. In 1828 the central states—Saxony, Hanover, Hamburg, Bremen and Brunswick—completed a Middle Union. Thus the formation of these three unions indicated that the day for a complete unification of Germany was not far off. The Middle Union proved to be the weakest of the three and began to break up in 1831. In 1833 Bavaria and Wurtemburg joined Prussia and were followed by Saxony. Negotiations were started with others and by the end of 1833 an agreement was arrived at between eighteen states covering a population of 23 millions. The first German Zollverein agreement came into force on January 1, 1834 “when, throughout three quarters of Germany, long trains of laden waggons stood in waiting to cross the frontier

lines, with goods now for the first time toll free." *

The leader of the German Zollverein was Prussia. The agreement which was concluded among the eighteen states provided for: (1) the abolition of internal tariff; (2) a common external tariff on the lines of the Prussian tariff of 1818; (3) the recognition of the sovereignty of the constituent states by laying down that the fiscal policy of the union should be determined by an annual congress of state delegates by a unanimous vote, thus even a small state could veto any measure by withholding its support to it, (4) the division of the proceeds of customs duties among the states in the proportion of their population; thus an advantage was given to smaller states to encourage them to join the union; and finally (5) the gradual introduction of uniform weights, measures and currency.

Between 1834 and 1852 the remaining states of Germany excepting Austria joined the Zollverein. During the first decade of its life, the general policy showed signs of stiffening up protection. But after the middle of the century, the wave of protectionism began to recede and an era of low tariffs set in. This was no doubt influenced by the adoption of free trade in England. But the fundamental factor which influenced the tariff policy was the growing political and economic power of Prussia. Her agriculturists, merchants and middle classes demanded free trade and these classes constituted the bulk of Prussian population. This does not, however, mean that the influence of the protectionist group had completely disappeared. After returning from America, Frederick List published in 1842 his book entitled the *National Systems of Political Economy* and advocated

* Clapham : *Economic Development of France and Germany*,

through its pages the adoption of a strong protectionist policy for Germany. He argued on the Mercantilist lines that the power of the state ought to be increased by the regulation of agriculture, industry and trade and by the sacrifice of individual interests in the interests of the community. He favoured protection on another popular ground, the infant industries argument. He feared that the development of German industries would be throttled by the severe competition of England. The opinion of List was shared by many Germans. Austria unlike Prussia favoured high protection. If Austria was kept out of the Zollverein, Prussia felt that she could go ahead with the liberal policy.

In 1853 Austria applied for admission to the Zollverein. The southern states also wanted that she should be admitted. But the interests of Prussia lay in keeping her out. There were three alternatives before her: (1) either to conclude a trade treaty between the Zollverein and Austria; (2) or to admit her to the Zollverein and complete it; (3) or to permit a separate Zollverein of the southern states and Austria. Prussia preferred the first alternative and a treaty was concluded with Austria in 1853. With her leadership kept unaffected by the exclusion of Austria, Prussia went ahead with the policy of lowering tariffs. In 1862 the Zollverein concluded a comprehensive trade treaty with France on the lines of the Cobden treaty between France and England signed in 1860. The treaty provided for lower duties and the most

The rivalry between Prussia and Austria for economic supremacy came to a head when the latter again applied for admission to the Zollverein in 1865. A favoured nation treatment.

war broke out between the two countries and Austria was defeated by Prussia in 1866 and the former was altogether excluded from the German political system.

When the Zollverein agreement was renewed next year, far-reaching changes were made by Prussia in it to facilitate her to continue her trade policy. The single body of state delegates was replaced by two assemblies, the one representing states and the other representing populations. Decisions regarding tariff changes which were required to be unanimous hitherto could thereafter be carried by majority votes. Thus the success of Prussia in retaining the leadership was a success of the free-trade policy.

In addition to common customs arrangement, the Zollverein countries introduced other changes expected to help the growth of commerce. In 1850, a common law regulating bills of exchange was introduced; in 1868, a common postal service was introduced; and finally common commercial institutions, weights and measures and currency (finally attained in 1870) were introduced. These measures were certainly useful in the expansion of internal and external trade.

In the forty years before the Empire was formed, the progress of Germany was conspicuous if not astounding. The Zollverein was no doubt one of the factors responsible for it, but not the sole factor. Clapham points out that often a mistake is made in attributing the entire credit to the Zollverein. He writes: "The acceleration in German industrial development which is perceptible from about 1835, and conspicuous from about 1845, was certainly connected with the creation of the Zollverein in 1834. But how much was due to the Zollverein, how much to better roads and the first railways, how much to that of spread of knowledge which no tariff can stop, cannot be determined. Many things which happened might have happened without the Zollverein. The tariffs of the German states before 1834 were impediments, but not insuperable impediments, to trade. Men have attributed economic results to the Zollverein which were not due to it."

rein, of which it was not really the cause, because of its immense political significance. "Post hoc, ergo propter hoc. Germany began to prosper about 1835; therefore the events of 1834 caused the prosperity. The fallacious argument slides easily. No doubt the events of 1834 were a true cause of prosperity. But they were only one of many, and their strength cannot be measured".¹ It cannot be disputed that by itself the Zollverein could not have achieved all the results unless other factors like communications, enterprise and capital were favourable to the establishment of large scale industries. It is known that Germany was late in developing banking. It is after 1850 that large joint stock banks were established. The Disconto Gessellschaft (1851) the Darmstaedter (1853) and the Berliner Handels Gessellschaft (1857) which were established after the middle of the century, as the years in the brackets indicate, followed a vigorous policy of encouraging the development of Germany cannot be underrated.

There were, however, two conspicuous results of the Zollverein which cannot be underrated. From the political point of view the Zollverein served a useful purpose. The loose confederation of states formed in 1815 could be moulded into a powerful Empire in 1871 because the way for it was paved by the first step in unity, Zollverein. In the days of the Empire, Germany could undertake naval construction and make a bid for colonies after 1885 because of the forceful leadership of Bismarck and the growing power of the country. Germany's emergence as a world power in the economic and political field was no doubt connected with the creation of the Empire in 1871.

The second conspicuous success of the Zollverein is the stimulus which it gave to internal and external

* *Ibid.* pp. 96-97.

trade. There are no figures to show the extent of the growth of internal trade. But there can be no doubt that with the removal of internal tariff barriers and the growth of population the total trade must have increased many times. As far as the external trade is concerned none of the European countries had an extensive foreign trade in the early nineteenth century. Their commercial rivalry with England started in the last quarter of the nineteenth century. All the same it may be stated here that with the establishment of industries and improvement of agriculture, the value of Germany's foreign trade and its character showed marked changes.* In 1864, 24 per cent. of imports were accounted for by articles of consumption, 38 per cent. by raw materials, 23 per cent. by partly manufactured goods or materials for manufacture and only 9 per cent. by finished goods. On the export side, 52 per cent. of goods were manufactures, 23 per cent. raw materials and the rest semi-manufactured goods or foodstuffs. Thus the effects of the changes in the country's economy were fully reflected in the character of foreign trade.

* Clive Day, *Economic Development in Modern Europe*, p. 287. The figures of imports and exports given in dollars are:

	Imports (In Millions Dollars)	Exports (In Millions Dollars)
1834	76	103
1854	192	239
1860	261	333

Chapter XVI

THE PROGRESS OF AGRICULTURE AND INDUSTRY

Agriculture

The years of prosperity which German agriculture enjoyed in the period before the Empire was formed came to an end with the world crisis of 1873. There was a precipitous fall in the prices of agricultural goods in Germany as in other countries and was accentuated by the growing competition of imported grain, meat and other products from Russia, Roumania, India, United States, Uruguay and Argentina. In the next twenty years the prices of wheat and rye, the two principal German commodities, ruled lower by 14 and 11 per cent. respectively. The indebtedness of farmers also increased with their growing inability to meet the expenses of production and the household. To make the situation more intolerable, the supply of agricultural labour was declining and their wages were rising. This labour shortage was no doubt created by the rapid development of industries which attracted workers from the countryside. The condition of agricultural labourers in the previous decades was far from satisfactory and, therefore, they left their country home with the hope of improving their life in the cities where greater freedom could be enjoyed by them. The situation was more serious in the eastern than northern or southern provinces because the large landowners of the east depended on hired labour for cultivation more than the peasant farmers of the north or the south.

The Junkers who were politically influential brought pressure on the government to give protection to agriculture. The argument of national self-sufficiency was also pressed forward as the problem of feeding a growing industrial population was already becoming serious. Von Moltke declared that : " When German agriculture collapses, the German Empire will collapse without a shot ". In the meanwhile the position of industries had deteriorated and Bismarck, once a freetrader, had to accept the principle of protection. When he brought forward a measure for industrial protection in 1879, the agricultural interests succeeded in winning him over as Bismarck himself was a Junker and his sympathies were with the class to which he belonged. The agricultural interests, therefore, secured a substantial measure of protection in the tariff of 1879. This, however, did not improve the position of the small farmers, though large land-owners benefitted to some extent. But the industrial workers suffered the most as their real wages were reduced by the consequent rise in prices. The industrialists continued to oppose agricultural protection but without success. As the agricultural position did not improve substantially before the Great War, the tariff was maintained at a high level though some temporary reductions in duties were made in the period 1890-1902. In spite of the depressed condition of agriculture, the area under six principal food crops showed appreciable increase before the war as the following table shows :

Year	In million hectares*
1880	21.7
1891	22.1
1900	22.7
1906	23.0
1912	23.4

* A hectare is equal to nearly $2\frac{1}{2}$ acres.

Before the Great War the position of agricultural holdings remained substantially unchanged. According to the Industrial Census of 1895, the holdings were distributed on the basis of size as follows:

(Hectares)	Holdings	Per Cent	Hectares in Hectares	Per Cent.
Under 2	3,235,169	58.6	1,807,870	5.6
2-20	2,005,940	36.2	13,016,655	40.0
20-100	281,734	5.3	9,868,367	30.3
Over 100	25,057	0.5	7,829,007	24.1

In the last decade of the nineteenth century however, the Prussian government embarked on a policy of establishing small holdings. Two laws were enacted in 1890 and 1891 by which power was given to the government to purchase land and give it in small allotments to permanent settlers. The big landowners who did not find land paying sold it to the government by taking advantage of the government's policy. By 1907 about 600,000 acres of land were purchased out of which nearly 300,000, acres were given to actual settlers. The position of the Junkers, however, remained still strong because of the privileges conferred on them by the law of entail. In other states also a similar attempt was made but without much success.

Under the stress of falling prices and shortage of labour, however, great improvements were made in the methods of cultivation by introducing artificial fertilizers and machinery. Between 1890 and 1913, the use of potash salts increased fourteen-fold; of super phosphates four-fold; of basic slag five-fold; and of Chile nitrates two-fold. Germany could develop the art of applying chemicals to increase yield because, in addition to the indefatigable efforts of her scientists, she possessed large deposits of chemicals. She has almost a monopoly of potash with the large deposits of it found in natural form round Stassfurt. Similarly increasing use was made of farm machinery.

Machinery driven by steam or electricity was used on the large farms in the east though its progress in the south and the north was slow because of the limited means of the small farmers. The effect of scientific development of agriculture was seen in the efficiency of production measured by the yield of various crops. Clive Day shows how Germany was foremost among many countries regarding the yield of certain crops.*

BUSHELS PER ACRE (AVERAGE OF 1903-12)

	Wheat	Rye	Barley	Oats	Maize	Potatoes
France	20	17	25	35	19	199
Germany	30	27	36	52	—	197
Great Britain	32	29	35	48	—	228
Russia	10	13	15	21	16	105
U. S. A	14	16	25	30	27	96

Agricultural education as the means of carrying scientific ideas to the agriculturists received growing attention of the government. A number of universities imparted higher agricultural education through special departments established for the purpose. Elementary education was imparted through agricultural schools. By the end of the last century 28 such schools were established in the agricultural regions. One of the interesting ideas of providing education to agriculturists was the establishment of winter schools where they could go for learning improved methods during the slack agricultural season. In addition there were started what are known as continuation schools to which workers and small agriculturists could send their children after they had finished their elementary education. Before the war there were nearly 2,000 such schools. There is no doubt that these agricultural educational institutions played a useful purpose in the development of scientific agriculture.

* *Ibid.* p. 173.

Another remarkable feature of the German agriculture is the skilful use made of co-operative institutions to help the small farmers. To-day there are co-operative societies in all branches of agricultural activity. The institutions supplying rural credit, however, outnumber others. They were started on the Raiffeisen principles enunciated in 1848. Their liability has been unlimited. Originally no share capital was issued and there were no dividends, but in later years some modifications were introduced in this plan. In 1912 there were 17,000 such credit societies with a membership of 1½ millions. The Schulze Delitzsch type of credit societies were started to supply the needs of urban population. But now they are also allowed to be started in rural areas. There have been also societies for the purchase of farm implements and necessaries and the sale of farm products. There were also a large number of co-operative societies in the dairy industry. In 1911 there were in all 25,000 societies with a membership of over 4 millions. Most of these societies are further organized into central unions of which three are most important, the Imperial Union, the Central Union and the Schulze-Delitzsch Union.

In spite of the extension of agricultural area and the increase in production, the Empire was not self-sufficient in regard to its food supply before the Great War. The population of the country had nearly doubled in the previous half a century and its needs had proportionately increased. Although there was some improvement in this respect in the decade preceding the war, in 1914 about 20 per cent. of German population was dependent on foreign food supplies.

During and After the Great War

When the war broke out in 1914, agriculture like-industries was called upon to supply larger amounts

of food as imports from outside were rendered impossible by the blockade of Europe. Agriculturists, however, experienced great difficulties in regard to transport and chemical fertilizers. They received, of course, better prices because of the inflation of currency. The food situation of the country, however, was not serious until 1916. Thereafter drastic cuts were made in civilian consumption and many people in cities were living a starved life. At the time of the revolution in 1918 the food situation was grave.

During the years of inflation after the war, the agriculturists continued to enjoy a period of prosperity because the prices fetched by their commodities were high and inflation had nearly wiped out their old debts. But when the currency was stabilised in 1924 and foreign competition reappeared, in spite of the high protection ranging from 30 to 60 per cent., the prices of agricultural commodities fell steeply. The fall was still greater with the coming of the depression in 1929. The position of agricultural prices before the rise of the National Socialists is made clear by the following wholesale price index of agricultural goods :

(1928 = 100)			
1925	101.3	1929	98.0
1926	96.0	1930	89.0
1927	98.3	1931	79.2
1928	100.0	1932	68.9

The physical volume of production during the post-war years, however, did not reach the pre-war level. There were four main causes responsible for this : (1) Germany lost many parts of the country under the Treaty of Versailles which were agriculturally important. From the point of food production, the loss of Posen, West Prussia, and North Schleswig was serious ; they constituted roughly 15 per cent. of the pre-war arable area ; (2) there was a decline in

the crop yields from 5 to 15 per cent. because of the shortage of fertilizers mainly attributed to the loss of Lorraine iron ore ; (3) under the treaty terms she was also called upon to make actual deliveries of live-stock and food ; and (4) finally the debacle of currency and the burden of the reparation payment had a very demoralising effect on the farmers and, therefore, improvements in technique were very slow. Angell therefore says that " that insistent struggle for reconstruction and rationalization which has characterised the basic industries since the end of inflation has made little impression on agriculture as yet ".* The position of agricultural production may be seen from the figures of production of the two important food commodities . †

Production of Wheat and Rye.

(In million metric tons)

	Wheat	Rye
1909-1813	9.6	3.8
1919	6.1	2.2
1920	4.9	2.2
1921	6.8	2.9
1922	5.2	2.0
1923	6.7	2.9
1924	5.7	2.4
1925	8.1	3.2
1926	6.4	2.6
1927	6.8	3.3
1928	8.5	3.9

The above figures show that there was a substantial improvement by 1929 after an early decline, but with the coming of the depression the position again deteriorated. The index of production of the two commodities (1928 = 100) declined by 1933 to 79.2 for

† Ibid, p. 423.

* Angell, the Recovery of Germany, p. 252.

wheat and to 63.7 for rye. The total agricultural production in 1933 was 16 per cent. less than in 1913. The effect of the agricultural situation was that Germany had to depend on foreign supplies for a substantial portion of her food requirements.

The agriculturists who were hard hit by the depression borrowed amounts of money. The total agricultural debt in December, 1932 was estimated at 12,000,000,000 marks. But there was no proportionate increase in the farm equipment and, therefore, it can be assumed that a part of it at least was incurred for the maintenance of the farmers' families. It was also partly incurred for the payment of increased taxation. In 1913 the total taxation of agriculture amounted to 220,000,000 marks ; in 1932-33, as a result of the increasing burden on the government, the taxation was in the neighbourhood of 500,000,000 marks. The interest burden of this debt amounted to 1,000,000,000 marks in 1931-32. In that year substantial reduction in interest rates was brought about by legislation, yet in the following years the burden remained substantially high.

The agricultural situation was thus very critical in the post-war years, more particularly in the years 1929-32. The government made an attempt to improve agricultural technique by carrying out an analysis of the technical means of production. An experimental station was set up in Saxony to study improved methods and introduce them in German agriculture. It further carried out time and motion studies, standardisation of agricultural machines and their parts and introduced better methods of grading, packing and marking. But none of these measures were of any avail in reducing the suffering of farmers from the depression.

The depressed state of agriculture created a serious economic problem for Germany. Because of

it there could be no possibility of removing agricultural protection. But its continuance had serious effect on the cost of living of industrial workers. Consequently their wages remained high. The ability of industry, which was struggling to re-establish itself, to increase its exports was seriously impaired. The tariff walls in foreign countries already placed insurmountable difficulties in the way of these exports. And yet it was imperative for Germany to secure a favourable balance of trade for making reparation payments. Thus the financial position of Germany was rendered very desparate by the agricultural position at home. "Agriculture has been", says Angell, "one of the weakest spots in the German economy since 1924, and one of the principal sources of internal stress. The remedy, apart from an expansion of the demand for its products much greater than is probable in the near future, seems to lie in promoting the advance of agricultural technique as rapidly as possible, both by educating the farmer in modern methods and by securing, probably from other countries, the additional supplies of working capital which are needed."*

Industrial Progress

The era of export capitalism started in Germany after 1871 when the Empire was formed. Though some industries had developed in the two or three previous decades their chief aim was to supply the home market. After 1871 the ideals of the nation changed, and Germany made a bid for world markets with the ultimate object of world supremacy. Regarding the new ideals, W. H. Dawson says :† "The last fifty years witnessed the decay and end of the old "subjective" epoch of self-absorption of concen-

* *Ibid.*, p. 253. For the steps taken by the National Socialists to improve the agricultural situation, see chapter XX.

† *The Evolution of Modern Germany*, pp. 1-2.

trated, self-centred national life, and the opening and the triumph of a new "objective" era of external effort, beginning with foreign trade ambitions and culminating in ambitious foreign politics. This more than anything else is the distinguishing mark of the Germany with which the world to-day has to do—the abandonment of the old national forms of life and the resolute pursuit of world-aims and a world-career, with the determination, if not to win absolute primacy among the nations and empires of modern civilisation, at least to dispute such primacy with any existing or potential claimant". This supplies the key to the marvellous achievements of Germany in the industrial field in less than half a century.

One of the indications of the rapidity of industrial progress was the swift movement of the population from the rural to urban areas. Before the Empire, three-fourths of the German population was in rural areas. The absolute number of people employed in agriculture in the following years did not decline much, but the entire growth of population was absorbed in the growing cities whose number increased before the Great War. The number of cities with a population of over 100,000 was only 8 in 1871, but in 1910 the same number increased to 48. The following figures show the growth of population and its distribution between the rural and urban areas :

Total population (In millions)	Percentage of rural population	Percentage of urban population
1871	41	63.9
1880	45	58.6
1890	49	57.5
1900	56	45.6
1910	65	40.0

The two pillars of German industrialism are coal and iron. All the successes which Germany achieved

in the industrial field before the Great War were due to the development of these two industries and, therefore, it has been rightly said that "Not on blood and iron, but coal and iron was the German Empire founded". Before 1870, though the fields in the Ruhr, Saar and Saxony were being worked, the fields in Silesia were still untapped. It is after this date that progress became marked. Although coal mining developed late, Germany benefitted by England's experience and as a result German mines were well-equipped, efficient and generally on large scale. As regards the production, in 1875 while Germany produced 28 million tons, England produced 99 million tons; in 1913 their respective figures were 273 million tons and 287 million tons. Thus German production was nearly equal to that of England which had an earlier start. The number of workers engaged in the industry increased from 120,000 in 1863-65 to 570,000 in 1906. In spite of the rapid growth of the coal industry, Germany did not export large quantities before the end of the last century; it is with the beginning of the present century that she became a large scale exporter. In 1912-13 her exports amounted to 20,000,000 tons.

Germany possessed large iron ore deposits. She also possessed first class smelting coke in the Ruhr and abundant metallurgical knowledge. When the railways were being constructed in the first half of the nineteenth century, the iron industry began to make progress, but it was very slow before the establishment of the Empire. After the Franco-German war when the iron fields of Lorrain came into her possession, the industry expanded rapidly. Subsequently, when the iron duties were reduced and were to be finally abolished in 1875, there was a crisis in the industry. Out of 435 blast furnaces, nearly 210 stopped work by 1876. The competition of Bessemer steel

from England threatened the industry at the very outset of its career. But in later years, two events gave the industry a new fillip. In 1878 the Thomas-Gilchrist process was perfected and was immensely useful to the utilisation of large deposits of basic ores which Germany possessed. And in 1879 Germany gave up her free trade policy and adopted protection. Thereafter its progress was very rapid, so much so that by 1903 Germany surpassed England and the United States. The production of iron in the period 1872-1910 is given below :

In million tons

1872	1.92	1890	4.62
1878	2.11	1895	5.43
		1900	8.46
1885	3.64	1910	14.70

In the development of the iron industry like the coal industry, Germany benefitted by the experience of England. The German units of production have been large and well-equipped. The government also helped the industry by cheap railway rates. Germany began to export iron and steel to other countries and became a serious competitor of England. In 1913 the exports of iron and steel and their products amounted to £100,000,000.

Another industry which Germany developed in this period was the shipbuilding industry. As stated before, the German mercantile marine was small until the last quarter of the nineteenth century. It was less than 100,000 tons. Even Spain and France had a larger tonnage than Germany. Thereafter the industry was established mainly at Bremen, Hamburg, Stettin, Danzig and Elbing. After 1880, by purchase and construction of steamships, the tonnage of the mercantile marine was gradually expanded. In 1900, her tonnage was estimated at 1,348,000 ; in 1910 it

reached 2,397,000. In the same year, the tonnage of the English mercantile marine was about 11.3 millions. Between 1910 and 1914, the industry was capable of constructing annually 400,000 tons of shipping. It gave employment to nearly 50,000 workers.

Of the remaining industries, the two which showed the high scientific skill of the German people were the chemical and the electrical industries. In the development of the chemical industry, Germany was at an advantage because of her chemical deposits. It is Germany alone which has a Stassfurt with potash salt found in a very easy form. She also possessed other chemicals in abundance in Thuringia, Hanover and Alsace. Before 1871 the development of the industry was small. In 1882, though small scale chemical establishments employed about 35,000 to 40,000 workers the basic chemical industry hardly employed 15,000 workers. Thereafter the latter developed very swiftly and by 1907, gave employment to nearly 45,000 workers. The progress of the chemical industry may be measured by the development of the potash and dye-stuff industries in which Germany remains unbeaten by others. The following figures show the increase in the production of potash:

Year	Tons.
1871	375,000
1881	906,000
1891	1,371,000
1901	3,535,000
1911	9,607,000

The value of the exports of potash in 1912 was £2,000,000. The dye-stuff industry of Germany also showed an unparalleled growth. In 1913 Germany produced three-fourths of the world's dyes and its exports were estimated at £10,000,000. The importance of chemical industries did not lie merely in exports which were no doubt great, but in their help to the

development of German agriculture. The yield of German crops was comparatively high because of the application of chemical manure.

The electrical industry also made an astonishing progress in less than half a century. With the growing use of electricity in industries, transport and domestic lighting, the demand for electrical appliances increased vastly. The beginning of the German industry may be traced back to 1847 when Werner Siemens established small works for the manufacture of telegraph instruments. Even as late as 1890 the industry had not expanded much but since then it progressed rapidly and by 1913 gave employment to nearly 140,000 workers. In the same period the number of establishments increased from 159 to 580. In that year Germany ranked first in the production of electrical goods and her share of world production was 35 per cent.; the United States and England were second and third, their respective shares being 29 and 16 per cent. The industry was highly centralised and in 1914 was controlled by two concerns, the Siemens-Schuckert and the Allgemeine Elektrizitäts Gesellschaft (General Electric Company).

The textile group of industries—cotton, silk, linen and woollen—had shown development in the beginning of the nineteenth century, but then these industries were in the handicraft stage and supplied a spare time occupation to the agriculturists. After 1840, however, machinery began to be used in the manufacture of textile fabrics, but the growth of the factory industry was very slow before 1871. Thereafter the progress was very rapid. Between 1888-89 and 1899-1900, the consumption of cotton increased from 410,000,000 pounds to 626,000,000 pounds. In 1911, Germany was third in the number of spindles; while England and the U. S. A. had 55,000,000, and 29,500,000 spindles, respectively Germany had

10,500,000. Between 1908-12 the average value of exports of coarser yarn and twist varied between £1.5 to £3 millions and that of manufactures between £17.5 and £21 millions. During the same years she was also an importer of cotton yarn and manufactures which were valued about £9 millions.

The silk industry made a similar rapid progress after 1871. By 1890, the number of power looms was 5,400; in that year the handloom silk industry was still strong and the number of looms was 22,000. Thereafter the progress of the factory industry was rapid and in 1909 the number of power looms was 9,900; hence the number of handlooms declined to 2,700. The industry is concentrated at Krefeld. Before the war the average value of exports varied between £7 millions to £10 millions.

The linen industry was a handloom industry at the beginning of the nineteenth century; it was able to supply home demand and also export to foreign countries. But after 1815 the industry suffered from the competition of imported cotton fabrics and failed to withstand it. After declining for some time, it showed signs of revival for a short period after the Zollverein. About 1840 machinery was introduced in it but without much success. After 1871 the introduction of machinery in the manufacture of linen was speeded up but the industry could not develop in the face of the competition of imported linen and cotton goods.

The woollen industry was also in the handicraft stage before the Franco-German war. Thereafter, in less than twenty years spinning became a factory industry, the progress of machinery in the weaving side was very slow until the end of the century, but thereafter it also became a factory industry. The hand spinning and weaving industry, however, did not completely disappear. By 1907, there were still

13,800 domestic weavers. Before the Great War exports of semi-manufactured and manufactured woollen goods were considerable and held the fifth place in the exported goods. In conclusion, it may be pointed out that though the textile factory industry made a rapid progress before the Great War; the resistance of handspinning and handweaving was great and they were not completely killed by the competition of the former.

The optical industry furnishes another example of the scientific skill of the German people. Under the guidance of Professor Abbe and Dr. Schott, the industry made a rapid progress before the Great War. The Prussian government also gave it its support after 1883. It has been able to produce more than one hundred varieties of optical glasses. One of the establishments which is known all the world over is the Zeiss works. The Leitz of Wetzlar has concentrated on the production of standard goods. The industry supplied nearly one-third of world's production before the war.

The above description of German industries would not be complete without the mention of scores of small industries in rural areas which have withstood the competition of factories and have contributed substantially to the national production. Among the products of these industries are included cutlery, toys, lace gloves, hats, clocks, knitted goods and embroidery works. They also supply spare-time occupation to the agriculturists.

The foregoing brief survey of industries would leave no doubt in the mind of the reader about the marvellous achievement of the German people in less than half a century. The factors which were responsible for this achievement were many and it is not possible to assign them any order of importance because of the difficulty of measuring their effects.

One feels that this phenomenal progress was primarily achieved because of the change in the ideals of Germany. She discarded the ideals of mere intellectual pursuit preached by men like Goethe and Schiller in the eighteenth and the early nineteenth centuries and adopted the ideals of material and political supremacy among nations. As said before the aim of the German Empire was political ascendency in the world and to achieve it, it was necessary that the ideals of the German people should undergo a change. The efforts of German industries and financiers to spare no pains to make the German industrial organization perfect breathe the same new spirit.

The attainment of political unity of the German people in the shape of the Empire in 1871 was another circumstance which must be given its due importance in the progress of Germany. Though the Zollverein had brought the German states closer, the feeling of nationality was still weak. Each state thought in terms of its own progress. In such an atmosphere the higher ideals just mentioned could not have taken roots. When the Empire was formed and the German people were united, they could be goaded on to a common ideal. A comprehensive co-ordinated national policy could be followed by the centralised government. This change became evident from the subsequent economic policy. The struggle between free-traders and protectionists ended by 1878 and an era of conscious protectionism set in. Industries were given protection with the definite object of forcing their development. Similarly the transport policy of the state was directed towards the encouragement of imports of raw materials and exports of manufactured goods. Further the state devoted a good deal of its time and money to spread technical knowledge and the results of industrial research.

The establishment of large scale industries in a

country assumes among a number of factors, the availability of raw materials, capital, labour and markets. As regards the first it may be said that Germany was fortunate in possessing large deposits of coal and iron ores which were extended by the acquisition of Alsace and Lorrain in 1870. As regards other raw materials, England had shown to her that they could be secured from the tropical countries, which were still undeveloped, in exchange for manufactured goods. If England could build a system of export industrialism Germany as well could do it. Germany of course followed a different course in developing industries from that of England and developed a national system of economy following old traditions based on Mercantilist lines. As regards capital the position of Germany was weak. It is a common habit with writers to attribute all the credit for the removal of the difficulty to the huge indemnity of five billion Francs received from France after her defeat. But one fails to understand how this accession of capital alone could solve the requirements of German industries for block and current capital. The explanation must, therefore, be found in the response of German people who had small savings and the banking system which was able to act on a bold policy. Veblen says in this connection : "The chief difficulty so to be surmounted is commonly held to be the want of capital, understanding by that term funds available for investment. Such funds were not precisely wanting in the German case ; nor were they, on the other hand, to be had in abundance on easy terms. The habit of investment in industrial enterprise was also wanting, though such habit seems to have been readily acquired ; at the same time the banking facilities needed appear also to have been readily found, so soon as the business situation called for a more extended recourse to the use of credit served by insti-

tutions of this class".* This view makes it clear that the flotation of German industries was greatly aided by the German banking system which developed in response to their needs.

As regards the other two factors, labour and markets, the growth of population and the change in the commercial and colonial policy placed the German industries in a favourable position. The rate of population in the Empire was exceptionally high. Between 1871 and 1910 the population grew from 41 millions to 65 millions. The increased numbers were absorbed in industries situated in the urban areas and thus supplied the labour force required by modern industries. The German workers were also intelligent and capable of efficient work. The adoption of a protectionist policy in 1879 reserved the home market which was growing with the growth of population. As regards the external markets, like England Germany had no colonies where she could find markets. Until 1871 Germany had given little attention to the building of a colonial empire. For some time thereafter the same policy was continued as Germany had no navy necessary for the purpose. Bismarck had declared "I am no colonial man". But in the eighties Germany changed her policy of keeping aloof and she made a bid for colonies in Africa. Germany gradually acquired wide areas in the East Africa, South Africa, Togoland and Cameroons. But these colonies did not supply all the markets that she needed. She made up this deficiency by her skill and competitive ability to cultivate markets in foreign countries in the face of competition of older countries like England.

Writing about the advantages which German industry enjoyed as compared with, for example, the English, Veblen says: "In these matters the German

community was peculiarly well placed. The classes who were in a position to profit from these new ventures were accustomed by tradition to a relatively low return on similar industrial enterprises under the earlier regime, and so a given rate of remuneration would appeal more strongly to them than to a business community accustomed to larger returns ; the natural resources to be made use of, having been lying relatively idle, were to be had at relatively slight cost ; a supply of competent workmen could be had at very reasonable wages ; and last but by no means the least, the break with an earlier and traditional situation in trade and industry left German enterprise hampered with fewer conventional restrictions and less obsolescent equipment and organization on its hands than the corresponding agencies in any of the contemporary English speaking countries".* Thus in spite of her late entry in the industrial field, Germany was able to establish her position as a first rate industrial country before the Great War.

Industrial Concentration

For a variety of reasons as in the U. S. A. the tendency of modern industry has been towards large scale unit. "The first distinguishing feature", says Bruck, "of the units working to satisfy the demands of hundreds and thousands of millions of consumers of a multifarious nature is their size. Sometimes they have as many employees as some countries had inhabitants a century ago. In some branches of industry, the units are growing into large scale enterprises. It is of the essence of private economy, that this great apparatus should not only achieve the prime task of satisfying demand but also that the units themselves should be stable in their structure and should show

* Imperial Germany and the Industrial Revolution, pp. 192-93.

a regular profit".^f Like the American industry, the tendency of German industry was towards large scale unit. This was inevitable as many of the industries depended on exports and to keep them steadily flowing to outside markets it was necessary that the cost of production should be reduced by introducing all measures of economy. The tendency became more pronounced after the crisis of 1873. There are two aspects of this tendency : (1) the absorption of small units into large ones ; and (2) the establishment among large units agreements with the purpose of promoting mutual well-being by restricting competition.

The first aspect would become clear from the number of persons employed in the units of different size. If the units are grouped into small (with 10 or less workers), medium (with 10 to 50 workers), and large (with more than 50 workers), the percentages of workers engaged in them at the time of the different industrial censuses appear as given below ; this is the basis of dividing industrial establishments adopted by the Industrial Censuses.

	1882	1885	1907
Small	61	47	36
Medium	13	17	18
Large	26	36	46

The above percentages show the relative predominance of small industry over the large one in the early years of growth ; but in the later years by gradual absorption the importance of large units increased until by the time of the Great War a little less than fifty per cent. of workers were engaged in the large units.

Though the tendency towards large scale units is sufficiently indicated by the above percentages, no idea can be had as to the actual size of enterprises in the

^f Bruck, *Social and Economic History of Germany*, p. 75.

last group. This would become to some extent clear from the findings of the Industrial Census of 1907. It revealed that in that year there were in Germany 1423 establishments employing over 500 persons each; their average employment was 1080. Two years later there were, by classifying units according to capital, 229 industrial establishments whose capital was in excess of 10,000,000 marks. The list was headed by the Krupp works at Essen with a capital of 180,000,000 marks. The Krupp alone employed 70,000 workers and, as estimated by a painstaking writer, supported, if the families of workers were included, 250,000 persons.

All these big units had grown to their existing size by the absorption of small ones. The tendency was more pronounced in the coal, iron and steel and electrical industries and banking. As a matter of fact there was no industry which was not affected by this tendency except the shipbuilding industry.

The second phase of the concentration movement consisted in agreements among large establishments for centralised control-over-one or more of their activities connected with production and distribution.

- Such agreements intended to check the destructive force of competition were executed in the continental countries and assumed many forms. First they appeared in England and then in France. In Germany they assumed a general and elaborate form and became a distinguishing feature of her industrial capitalism. This tendency, however, was inevitable in large scale capitalism based on private economy. "The economic system of modern times", says Levy, "shows that it was not individual competition which stood on the threshold of modern industrial capitalism. On the contrary, the early period of modern industrial capitalism was characterised by monopolies in many of the 'new' trades, and by capitalist domination over

the guilds through some sort of putting out system."

The movement towards such agreements started after the crisis of 1873 when the heavy industries found that the prices of their goods fell steeply and that the huge capital which they had sunk in their enterprises had become unprofitable. They were therefore impelled to come together to demand protection to their industries. They secured protection in 1879, but to their surprise they found that the fall in prices did not stop. The industries had grown so rapidly that as a matter of fact internal competition was ruining them. Hereafter, therefore, agreements to check local competition and stabilise industry became a common feature. Before protection was given, the agreements which were formed were characterised as the "offspring of poverty"; after protection, Professor Schumpeter calls them as "the offspring of protection". But as will be evident from the number of agreements in the different periods, they were not only popular in depression but were also formed in periods of prosperity as between 1888-91 and, therefore, it would be right to say that combinations immensely suited the temperament of German industrialists.

Such agreements were generally signed between independent entrepreneurs. They took mainly three forms. In the earlier period an arrangement known as the 'interest convention' was arrived at between independent competing producers. It generally related to prices and markets and sometimes even to the pooling of profits. Later on these loose verbal agreements gave place to more definite written legal agreements and came to be known as cartels. Even in this form there were a number of variations. Some agreements merely controlled delivery of goods and conditions of payment as in the textile and certain finishing trades. Another form of cartel, known as the 'Kal-

kulation' merely laid down uniform methods of costing for the purpose of arriving at the final selling price. A more advanced form was the 'Production' cartel which controlled output and prices and sometimes even markets by allocating certain regions to the constituent units. The highest form of cartel was the 'Syndicate' in which all the output of independent entrepreneurs was entrusted to a selling office and the role of the producers was merely restricted to production.

The cartel movement was not very strong before 1877 inasmuch as there were not more than 14 active cartels in that year. Thereafter the movement spread widely and by the end of the century the number of cartels formed reached 350 out of which 275 were active. Of these cartels 76 were formed between 1879 and 1885 and 120 between 1885 and 1890. This large number of cartels formed before 1890 was attributed, as said before, to the distress of German industries. But after 1890 when conditions of prosperity reappeared, the movement did not stop. Its progress continued for the next two decades and by 1914 there were 385 active cartels in Germany. Of these 62 were in the iron industry, 19 in the coal industry, 11 in other branches of the metal industry, 31 in the textile industry, 132 in the brick and tile industry, 10 in the glass industry, 17 in the food and tobacco industries, 11 in the wood and paper industries and the remaining were in miscellaneous industries. These figures are sufficient to indicate the strength and the scope of the cartel movement in Germany.

The imposing array of figures of cartels in different industries, however, cannot show the true nature of industrial organization that came into existence. On the contrary it may be said that there is no field of economic organization in which figures prove or explain so little. The distinguishing point of com-

binations is their power to control industry and hence their importance can be realised only by studying the amount of production controlled by them. It is not possible to describe here this aspect of all the cartels for want of space, but some idea could be had from examples of the coal and steel industries. The Rhenish-Westphalian Coal Syndicate (1893) controlled the entire coal industry of Rhineland and Westphalia. The Steel Works Union (1904), Dusseldorf, controlled practically the whole of the steel industry.

The attitude of the German government towards cartels was ambiguous in the beginning. Though in theory it proclaimed itself to be in favour of free competition, in practice it occasionally supported them as in the case of the Potash Syndicate or the Rhenish-Westphalian Coal Syndicate. The cartels also received an indirect support from the state in the form of commercial and transport policies directed towards helping trade. Nothing was done to interfere directly with private enterprise.

The cartel movement gave rise to mixed effects. It brought about steadier conditions in the industrial structure of Germany. Industrial concerns were able to maintain steady employment by keeping the volume of their production steady by following suitable price policies. Sometimes they charged higher prices to home consumers and dumped goods in foreign markets. Such differentiation in prices was made possible by protection. Where certain concerns joined cartels voluntarily, they were allowed to share in profits ; if they were, however, to face unrestricted free competition, there was little chance for them to survive. When necessary, some of the syndicates closed the inefficient plants and worked only the efficient ones under their control. Those concerns which were closed continued to receive a share in profits, but even then the syndicates benefitted because the closure of

such plants helped them to improve prices. When the price-struggle entered the international field, it led to the formation of international cartels and the protection of the interests of industries concerned. The examples of industries in which such cartels were formed were potash and iron and steel. Though no one disputes that cartels helped German industries to forge ahead, the interests of consumers and small industries suffered a great deal. Some of the small industries which depended on the supply of raw materials controlled by cartels suffered in spite of rebates offered by their price policies. Some concerns which refused to join cartels were trampled out of existence by their competition with the backing of huge financial resources. The general consumer also complained about the artificially high prices charged by cartels to make their dumping in foreign countries successful. But these defects were inevitable in the monopolistic development of industries unless the consumers organized and the government intervened to protect their interests as in the United States. One doubts whether even then the power of monopoly, once it had come into existence, could have been broken.

During and After the Great War

When the war broke out in 1914, the German industries were faced with an altogether different situation. Germany was like a besieged fortress and had to be self-sufficient without choice. Her trade declined. Imports of many of the raw materials required by her industries were stopped and consequently they had to find either substitutes or reduce production. Thus the cotton textile industry which depended on imported cotton was unable to import more than two per cent. of its normal annual requirements during 1916-1918. Even though an attempt was made to find substitutes, the production of the industry

declined heavily. The only two industries which recorded progress were the chemical and the iron and steel. During the war industries were also under a close supervision of the government.

Under the stress of war conditions remarkable changes were made in the organization of industries. The cartel movement received an impetus from the government which was in need of increased production. Some of the former powerful cartels like the Rhenish-Westphalian Coal Syndicate which showed signs of disintegration were compelled by the government to renew their agreements. In others, new cartels were voluntarily formed. Efforts were also made to economise the consumption of power because of the shortage of coal. As a very large part of the manpower of the country was drafted into military service, there was a shortage of labour for industries and, therefore, labour-saving devices were introduced wherever possible. In short an attempt was made to rationalize industry to achieve the maximum results.

The industrial history of Germany in the post-war years falls into two distinct periods, the inflation period and the period after the stabilisation of the mark. The first period opened with bleak prospects for Germany because of the heavy burden put on her by the Treaty of Versailles. According to its terms, Germany lost nearly 19 per cent. of her pre-war coal production, 19 per cent. of steel production and for all industries taken together, nearly 15 per cent. of her pre-war industrial production. The inflation of currency which was resorted to for financing the war had already led to depreciation of the mark ; the inflation after the war transcended all bounds until the currency was finally repudiated and lost its position as a measure of value. In this momentous period the outward appearance of German industry was one of prosperity. Because of the inflation, prices were

rising but wages, salaries and taxes lagged behind and, therefore, left a substantial margin of profit for it. For the same reason, the depreciation of the mark, foreign competition ceased while the demand at home and from foreign countries increased rapidly and created hopes about the future. The manufacturers were also able to pay off their previous debts in the depreciated currency and were freed of their interest burden. Thus financially the period was one of unprecedented prosperity for the industry.

But this prosperity would appear to be fictitious when measured in terms of the physical volume of production. In spite of the fact that extensions of industry were undertaken from money borrowed at relatively low rates of interests and that the general appearance of feverish activity was noticeable, production was far below the level of 1913. This was no doubt partly due to the loss of resources; but the chief causes were different. Though demand had reappeared, the buying capacity of the German people was being impaired by the successive waves of inflation. On the other hand the capacity of industry which was already expanded during the war was further extended by the new establishments which were badly constructed in haste. The capacity of some of the industries producing consumer goods was, therefore, far in excess of demand. But the technical efficiency of all these plants was hopelessly out-of-date. In the period of inflation when prices were good and home market secure, technical improvements were neglected. Because of the demoralising effect of inflation and underfeeding, the efficiency of workers had also suffered and their per capita production was never upto the pre-war level. According to Herr C. V. von Siemens, in the coal industry production per worker per shift had declined from 1.04 tons in 1913 to 0.59 tons in 1920. Moreover, there was no

incentive to workers to work hard as little difference was made in the wages of skilled workers because of the necessity to find work for a large demobilised army. Hence in spite of large capacity, industries could not expand production. The following statistics show the position of industrial production in this period :

Year	Coal	Raw (1913 = 100)	Steel	General Production
1913	100	100	100	100
1919	66	40	53	
1920	75	49	62	
1921	78	58	78	
1922	77	65	89	
1923	42	36	56	

The concentration movement, however, received an impetus in this period because of the extraordinary conditions. To exploit the situation created by inflation fully, a number of cartels were formed. Their abuses became so flagrant that in 1923 a law was passed to control them and to give full publicity to their working results. In spite of it, the number of cartels was not very much affected and in 1923 it was estimated to be about 1500. But more important than the number was the recent tendency to form outright combines and trusts. There were two main factors responsible for this new phase of the concentration movement. Firstly, because of the loss of resources under the Treaty, and the disorganization of production resulting from inflation, there was a constant fear of shortage of raw materials. This led to vertical combinations to ensure regular supplies. Secondly, there was an uncertainty of markets, and, industries in similar line of production were combined into horizontal combines to avoid internal competition. These two influences were no doubt bringing indus-

tries closer, but had it not been for the easy money conditions the formation of huge combines would have become difficult. This second phase was again more pronounced in the coal and iron and steel industries. In 1923 more than half of the total production of coal and iron and steel in the Ruhr was controlled by ten big combines. Of these the most important was the Siemens-Rhein-Elbe-Schuckert-Union. Similar big combines were formed in the potash, lead, zinc, copper and petroleum industries. Thus the inflation period brought about a conspicuous change in the organization of German industries.

The German currency was stabilised at the end of 1923 by introducing a new monetary unit the Rentenmark. Consequently the fictitious prosperity of industries vanished. There was as a matter of fact a shortage of working capital. Many business firms which were on the verge of bankruptcy collapsed and business came to a standstill. But these conditions did not last for long. At the request of Germany the Reparation Commission set up two committees, one on the question of reparations and the balancing of the budget, under the chairmanship of General Dawes and the other on the question of estimating the value of capital which had fled from Germany and the means of bringing it back, under the chairmanship of Sir Reginald McKenna. The reports of these two committees recommended that it was essential to restore stable financial conditions for the re-establishment of German industry. The recommendations of the Dawes committee, commonly known as the Dawes plan, suggested measures for the collection of reparation payments without disturbing the financial structure. The German industry, therefore, very soon showed signs of revival with the return of confidence in German currency. For the next six years great improvements were introduced and by 1929 the in-

dustrial production was larger than that of 1913. But with the coming of the depression, the German industry again suffered a setback.

The German industry was revived by adopting a thorough-going rationalization consisting of the following steps: more efficient ways of utilising the existing plant and the establishment of new and better machinery; construction of new buildings designed for increasing efficiency; devising of more effective productive schemes; adopting standard patterns, classifications and specifications; improvement of administrative and commercial methods; and reorganization of industries by further concentration of control.

German industries were short of capital after the stabilisation of currency. Rationalisation measures required more fresh capital. But the confidence which was restored by the Dawes Plan in the ability of German industries to repay borrowed capital opened the capital markets of the world to the German entrepreneurs. It is estimated that between 1924 and 1928 the total amount of foreign capital imported was between 18,000 to 19,000 million marks. Of this nearly 6,800 million marks was obtained by long term secured loans, nearly 5,500 to 6,000 million marks by the sale of industrial shares and another 6,000 million marks by short term loans. Of these funds nearly two-third were received by industries and one-third by the government. In spite of the fact that these loans helped the revitalisation of industries, a certain element of instability was introduced by them into German economic structure. The presence of very large short term loans was likely to throw it out of gear at the slightest disturbance of world economic conditions. Further in normal times, the necessity of paying interest amounting to 1,200 to 1,400 million marks, in addition to reparation payments, was having a

depressing effect on the exchanges.

By 1927 the recovery of German industry was complete and it aroused surprise as well as fear in her competitors. It began to be styled as the Reformation in the field of economics. Taking together the big six industrial groups—coal, iron and steel, machinery, electro-technical division, textiles and chemicals, the results achieved were as follows : (1) The value of their production increased from 17,000 million marks in 1913 to 25,000 million marks in 1927. But as the prices in the recovery years were higher than in 1913, the increase in the physical volume of production was only 15 per cent. more than in 1913. (2) From the point of view of foreign trade, the position had improved in some respects and deteriorated in others ; the value of exports increased from 2,800 million marks in 1913 to 3,200 million marks in 1927, but as export prices were higher than in 1913, the volume of exports was actually less than that of 1913. The position of iron and steel, textiles, electro-technical and machinery industries, however, had undergone a change ; they were now dependent on the imports for a part of their raw material requirements. (3) Technically the industry was in a superior position ; though the actual volume of production was only 15 per cent. more than that of 1913, the capacity of production was nearly 30 to 40 per cent. in excess. (4) The financial position was also sound ; they were able to declare dividends ranging from 6 to 7 per cent. on their nominal capital. The only danger that they had to be afraid of was the withdrawal of short term borrowed funds. (5) Because of technical improvements the competitive ability of these industries was high ; but for the heavy capital charges and the burden of excess capacity, it would have been more threatening to other countries.

Unhindered by governmental interference, the cartel movement made further progress. Though no accurate figures of cartels and combines could be had, the government estimate placed their number at 3,000. The degree of concentration could be judged from the fact that about 2.8 of enterprises owned nearly 61 per cent. of all the real industrial assets.

When the economic crisis of 1929 spread from the United States to other countries, the central European countries were seriously affected. With the decline in the international trade and the increase of financial difficulties, the German industrial production declined steeply. The position of Germany relative to other countries is shown in the following statistics :

Index of Industrial Production

1925-1929 (average) = 100

	Germany	England	U. S. A.
1925	91	94	95
1929	110	105	108
1930	85	97	100
1931	77	83	84
1932	64	88	68

The above index clearly shows the seriousness of the industrial situation in Germany. Consequently the number of the unemployed rapidly increased. In 1930 it was 5 millions ; in 1932 it had increased to 6 millions. In spite of the protection given by unemployment insurance, the condition of the workers had become miserable and in no small degree paved the way for the rise of the National Socialists to power.

Chapter XVII

TRANSPORT, TRADE & TARIFF.

Since the formation of the Empire, increased attention began to be given to the construction of roads. As the motor transport developed, the need for a better surface was felt and, therefore, improvements were carried out under competent administration. Roads were planned with a view that they should serve as feeders to railways. The progress of roads could be seen from the present mileage of roads in Prussia which is estimated to be about 30,000 as against 1,280 in 1841. .

The era of canal construction started in Germany when in all other countries it had come to an end. Between 1871 and 1903 a number of projects were undertaken with the result that Germany possessed 9,000 miles of navigable waterways; of these about 5,041 miles consisted of navigable rivers, 1,369 miles of canals and 885 miles of channelled rivers. In 1905 a new programme of construction costing approximately 335,000,000 marks was chalked out. Of the canals constructed in later years, two were the most important, the Kiel canal and the Dortmund Emden Canal. Both were completed in 1914 and were mainly meant for strategic purposes. But they were also used for carrying merchandise. The latter canal was very wide and ships of 900 tons could easily pass through it. The Kiel canal also proved of great use in reviving the trade of Baltic towns like Lubeck. Canal and canalised rivers provided the industries of Germany an additional means of transport besides the railways. It was estimated in 1907 that about 26,235 vessels were engaged in transportation on the inland waterways. A similar survey in 1911 showed that these waterways carried 76,632,000 tons of goods. The canal system of

Germany, unlike that of England where it was superseded by railways, is to-day working side by side with the railways. Financially, however, canals have not been as successful as the English ones in their hey-day.

At the time of the formation of the Empire the German railway system was very complicated. Some of the small states had constructed and owned their railway lines ; in others like Prussia states had constructed and owned some lines while others were in private hands. "In regard to the railway communication", said Bismarck, "we have arrived at a state of things, which has not been peculiar to Germany since the Middle Ages. We have, I believe, in Germany sixty-three different railway provinces, that is, however, saying too little, for they are more independent than provinces ; I might call them railway territories —of which perhaps forty fall to Prussia... Nowadays we see that the railway administrations, without benefit to the railways and shareholders, and as it were, as a kind of sport, wage with each other wars which cost much money, and which are wars of power, without financial competition, more than anything else". Bismarck had long thought of centralising all these railways in the hands of the Empire government. With that end in view a provision was also made in the constitution of the Empire. There were other reasons also which encouraged him to work towards such an end. He saw that unless the German railways were unified and a suitable rates policy was adopted, the German industries would not be able to compete effectively in foreign markets. He also believed that it would help the unity of the Empire and assure Prussia of her leadership among other states.

Bismarck took the first step in this direction by creating an Imperial Railway Board in 1873 and entrusting to it the work of drawing an Imperial railway code to control and unify the railway system. The

code failed to pass the legislature. In 1876, he again made an attempt ; this time he proposed the transfer of railways to the Empire and offered on behalf of Prussia to initiate it. Legislation to this end was introduced, but a majority of states led by Bavaria offered resistance. The states were not only not prepared to transfer their railways, but were not prepared to accept the Prussian lines. Being afraid however that Bismarck would buy the private lines in their states behind their back, they immediately started buying for themselves the private lines in their own states. The refusal of states to hand over their railways to the Empire was partly the result of jealousy and partly of fear. They feared that centralisation of railways would place an enormous amount of patronage in the hands of the Imperial government and increase its political influence ; financially also the Empire would become more independent of the states. They also imagined that the abolition of competition would be detrimental to the interests of the public.

Foiled in this attempt, Bismarck concentrated his attention on improving and nationalising the Prussian railways. Consequently the railways in Prussia came gradually under the control of the Prussian government and in 1910 the mileage of state railways was 21,250 ; privately owned railways constituted hardly 0.9 per cent. of the total railways. Bismarck was also successful in buying private railways in the north by offering tempting terms. Moreover in 1897 Hesse-Darmstadt combined railway system with that of Prussia and thus all the northern railways came under the control of Prussia.

In other states also railways were bought over by government. In the south the states had to adopt a uniform policy to stand the competition of Prussian railways which had an advantage of cheaper coal.

Thus though Bismarck's policy of bringing all the railways under the control of the Empire did not succeed, before the Great War they were largely under the control of their respective governments. The progress of state-ownership can be seen from the following figures :

	Total mileage	State-owned mileage
1875	17,488	.....
1880	21,028	13,888
1880	26,136	18,738
1900	31,049	28,570
1910	36,894	34,596

In 1913, the capital invested in railways was about 17,350,000,000 marks. The country had about 18 miles of railways per 100 miles of the territory. This proportion was exceeded in Europe only by Belgium, Holland, England and Switzerland. The German railway system was also one of the most efficient railway systems of the world. The Central Railway Board was also successful in bringing about uniformity in passenger and goods rates. The railway rates policy was also designed to help agriculture and industries of the country. Cheap railway rates were offered on the import of raw materials and export of manufactured goods. The object was to help German industries to compete effectively in foreign markets. To encourage trade through German ports, goods coming through foreign ports were penalised. Preferential rates were granted to foreign imports only when they were not likely to affect adversely home industries. The exportable goods which were given special rates were coal, iron and steel, spirits and alcohol, glass, sugar, etc.

During the Great War, the German railways worked with efficiency though there was some deterioration in track and rolling stock. The deterioration, however, became more pronounced after the armis-

tice. By the Versailles Treaty Germany was required to deliver to the Allies 5,000 locomotives and 150,000 freight cars just when the railways already disorganized by the revolution were called upon to play a vital part in the economic rehabilitation of the country.

When the country was being reorganized after a crushing and demoralising defeat, the Weimar constitution made provision for the complete nationalisation of railways. Accordingly in 1920 the German Parliament passed a law by which the Reich took over all the railways and placed them under the control of the Minister of Transport. The only right that was given to the states was to decide the standard of valuation in calculating the price of the railway to be transferred.

During the period of inflation, the railways were unable to earn adequately and, therefore, ran into deficits. Their losses were mainly due to the depreciation of currency which made adjustment of rates difficult. Before 1924 the rates were increased by nearly 600 per cent. and they could not keep pace with the depreciation of the mark. The operating costs also increased because of the high price of coal, the introduction of an eight-hours day and over-staffing of lines.

When the Dawes Plan was given effect to, the railways were transferred to a joint stock company for management though the ownership still remained with the state. Bonds worth 11,000,000,000 gold marks were issued to produce revenue for the reparation payments. The company was to be managed by a board of directors which consisted of nine directors elected by the government and shareholders and nine elected by the trustees of bonds. The company was set up with a capital of 26,000,000 gold marks and had 33,000 miles of railways under it. This change from state to private management was made on the ground

of expediency rather than principle.

Another aspect of railway development in recent years was the growing competition of road transport with them. In Germany co-ordination was brought about by proper organization of road transport. Germany was divided into sixteen areas each one of which was served by a road motor transport company, dealing with both passenger and goods traffic. To safeguard their interests and to co-operate with railways these sixteen companies were grouped into a central company at Dresden. This body was then authorised to enter into agreement with the railway company to eliminate competition. Road transport now works as feeder to railways and through co-operation direct rates and fares are quoted. Thus the problem of railroad competition has been successfully solved.

To support the growing foreign trade of the country, Germany encouraged expansion of her mercantile marine, but before the war it was far behind that of England. During the war nearly two million tons of shipping was lost either by enemy action or by sea peril. When the Versailles Treaty was signed, Germany was required to transfer to the Allies all ships over 1600 tons, half of those which were between 100 and 1600 tons and a fourth of her fishing boats and trawlers. The German shipping was at its lowest points in 1920. Since then gradually the tonnage has been increased. The following figures show the position of German shipping at different dates :

German Mercantile Marine

(In million tons)

1870	0.98
1914	5.45
1918	3.22
1920	0.67
1925	3.07
1929	4.09

Development of Trade

Though no accurate statistics of the internal trade of Germany can be given, during the period 1871-1913 there was an expansion in its volume and scope. With the growth of industries, the variety of goods entering consumption of the German people showed great increase. With the development of transport, railways as well as waterways, the facilities for distribution of goods became cheap and extensive. The population of the country also increased by 24 millions in this period and there was a substantial rise in its purchasing power and the standard of life. The development of banking and credit supported trade on a larger scale than before. The combined effect of all these factors was to increase the size of domestic trade.

The growth of the foreign trade of Germany in this period was more surprising than that of her home trade. The task of capturing international markets was difficult because of the advantages of early start enjoyed by England which was regarded by the world as its workshop. Moreover Germany produced the same kind of goods as the latter country. But she made up for her late start by technical efficiency and financial accommodation which she gave to her customers. Though she competed with England in her markets, she also found new areas for commercial expansion. The following figures show the growth of the import and export trade :

Value of German Exports and Imports *
(Special trade†)

	Imports	Exports
	(In Milliard marks)	
1875-1884 (10-year average)	3.45	2.96
1885-1894 (10-year average)	3.79	3.19
1895-1904 (10-year average)	5.43	4.34
1905-1913 (9-year average)	8.91	7.39

The above figures show a rapid increase in Germany's foreign trade after the industrial development became swift. Before 1870, the export trade mainly consisted of foodstuffs and raw materials and the import trade of half-manufactured goods and food-stuffs. By 1914 the character of trade had completely changed. Of the exports in that year 60% were finished goods and the rest raw materials and food-stuffs. In the raw materials, the most important commodity exported was coal. On the import side nearly 81% of goods consisted of raw materials, food-stuffs and semi-manufactured goods. The most important imports were cotton, wool, silk, wheat, barley, coffee, rye, flour, etc. The remaining 19% consisted of finished goods.

As far as the direction of trade is concerned it is interesting to note that the bulk of her trade was with European countries. The percentages of imports from and exports to European countries in 1912 were 56.2 and 75.4 respectively. The American imports and exports from the total trade in the same year were 18.9 per cent. and 16.7 per cent. Of the total trade in 1912 imports from and exports to Asia were 9.4 per cent. and 4.8 per cent. respectively.

* Knight, Barnes and Flugel, *Economic History of Europe*, p. 628.

† Special Trade is net, exclusive of goods for re-exports—that is, German produce exported and foreign produce (including raw materials) imported for German consumption.

From the study of the above figures it will be noticed that though German trade developed rapidly before 1890, its progress was much more quick thereafter. The explanation for this quick growth will be found in the general prosperity of the world in the decade before the Great War and in the commercial policy of Germany. She could use her protective duties to bargain with other countries. If Germany wanted to export her industrial goods to agricultural countries, she would have been required to allow the import of agricultural goods by lowering duties. So long as Bismarck was in power, the agricultural interests succeeded in thwarting any attempt at lowering duties. But after 1890, under von Caprivi and von Bulow, where necessary, concessions were made to other countries and a number of treaties were signed by mutual tariff reductions and by the application of the most-favoured-nation principle. In the decade preceding 1913 the German trade reached its highest level for the past half a century and was second to that of England only. The following figures show the percentages of total trade with countries bound to Germany by tariff agreements and by most favoured nation treaties :

With Tariff Agreement Countries

	1891	1904	1907	1910	1913
Imports-% of total	37.4	35.1	36.3	36.5	33.3
Exports-% of total	37.6	37.6	40.0	39.0	41.4

With Most Favoured Nations

Imports-% of total	55.7	57.6	56.5	53.7	57.7
Exports-% of total	55.5	55.1	53.0	52.7	55.5

The figures of foreign trade also indicate that before the Great War the imports were larger than exports. But this unfavourable balance of trade on merchandise was more than made up, as in the case of England, by her invisible exports. Her shipping

services through the establishment of two great companies, the Hamburg-American and the North German Lloyd, brought her financial gains. In addition her banking services and investments abroad added to her income. Thus she was able to balance her foreign trade and also have an investible surplus before the war.

The competition of Germany with England and the United States became very keen because of her efficient consular service, readiness of banks to give support to the expansion of export trade and wide publicity. To keep the industries at home stable, more and newer markets had to be developed and consequently the result of the struggle between the competitors was jealousy. Psychologically also the German nation had developed a sense of new prestige and was not prepared to accept a position of inferiority in the world as in the past. German militarism and capitalism were so interconnected that trade rivalry was bound to lead to clash of arms.

During and After the Great War

For four years of the war Germany was nearly cut off from the outside world's resources of foodstuffs and raw materials. She was unable to get supplies of cotton, jute, rubber, silk and other primary commodities. Her small imports practically came from her allies. On the other hand her export trade had come to a standstill. This situation was not only the result of blockade but also of the preoccupation of Germany's industries with the problem of supplying the requirements of the war. Hence Germany was not able to pay in goods for whatever imports she could get and, therefore, her adverse balance of trade during the war amounted to nearly fifteen billion marks. A part of it she met by paying in gold, part of it by sale of her foreign investments and the remainder by obtaining foreign currency on loan.

During the period of inflation, the foreign trade was dislocated because of the currency situation. It, therefore, makes the calculation of the value of imports and exports unreal. The German industries which were disorganized during the war were unable to increase their exports though occasionally because of the depreciation of currency there were spurts of activity. Though imports showed some revival, they were also subjected to restrictions because of the inability of Germany to pay for them. Thus Germany's foreign trade between 1919 and 1924 was not more than 40 per cent. of her trade in 1913. The following figures show the volume of trade :

Year	Imports (In million double cwts.)	Exports
1913	718	737
1921	257	138
1922	459	216
1923	466	127
1924	388	191

After the currency was stabilised and the Dawes Plan supplied the basis for recovery, the foreign trade of Germany revived. The following figures show the value of imports and exports since 1925 :

Merchandise Trade by Value
(In million gold marks)

1910-13	10,026	8,659
1925	12,362	9,291
1926	10,002	10,415
1927	14,228	10,801
1928	13,995	12,299
1929	13,447	13,483

There are certain features of the foreign trade of Germany since her recovery which make its character altogether different from that of the pre-war trade.

The total value of her foreign trade has grown from nearly 21,000 million marks in 1913 to about 27,000 million marks in 1929 and this increase is likely to give an impression that not only the German recovery was complete but that she was able to gain some fresh ground. Actually, however, things were different. The physical volume of goods entering this trade was smaller than that of 1913, and therefore, the rise in value must be attributed to the post-war prices which were about 40 per cent. higher than the pre-war prices. In 1928 the volume of exports was nearly 11 per cent. less than in 1913. This failure of exports to reach the pre-war level has been attributed to the high cost of production, the loss of Germany's former colonies, the growth of industries in her former markets, the rise of economic nationalism in European countries and the consequent attempt at raising tariff walls, and lastly the inability of the country to offer credit facilities on the former scale.

Again in the five years under consideration, except in 1929 the imports were larger than exports. Thus the balance of trade was unfavourable to Germany. This excess of imports was due to the necessity of supplying food to the population which was growing and the raw materials to industries which were deprived of their former resources under the Treaty of Versailles. She was importing large quantities of food materials like wheat, barley, rye, oats, potatoes and raw materials like coal, iron ore, copper, cotton, wool and petroleum. Her great export industries were also placed in a vicious circle. Unless they imported raw materials they would not be able to export. Before the war, the excess of imports was paid for from her income from invisible exports like interest receipts on foreign investments and shipping and banking services. During the war all her foreign investments were lost. She was, therefore, required

to pay for these imports by borrowing in foreign countries.

In addition to the unfavourable trade balance, she was called upon to bear the burden of reparation payments and interest and service charges on the debt which she incurred. She could meet these payments only by borrowing more from foreign countries. It is estimated that she borrowed from foreign countries to the extent of 19,000 million marks. The chances of her increasing exports to such an extent as to enable her to pay off the current trade deficit and the principal were very limited and she could, therefore, maintain the stability of her economy so long as further loans were available. The international financial position of Germany is shown by the following figures : *

Germany's Balance of International payments,

1924-23 inclusive

(In million marks)

Credits

1	Loans floated abroad : net proceeds	6,200
2	Sales of domestic securities abroad	5,500-6,000
3	Short credits from foreigners, outstanding at the end of 1928	6,000-6,500
4	Services, net	1,200
5	Credit for Reparation deliveries in kind	2,400
Total in round numbers		21,600-22,000

* Angell, *The Recovery of Germany*, p. 303.

Debts

6	Commodity trade net, including Reparation payments	10,300
7	Gold and silver imports net	2,600
8	Interest, dividend amortization payments, net	2,700
9	Reparation payments in cash, not included in (8)	2,300
10	German purchases of foreign securities and German short term credits granted abroad and out at the end of 1928	3,000-4,000
Total in round numbers		21,000-22,000

As regards the composition and direction of trade, there was no fundamental change from the position of 1913. On the export side, 73 per cent. of goods were finished goods, 21 per cent. raw materials and half-finished goods and the rest food materials. There was also no change in the classes of exported goods except that some synthetic goods like nitrates and artificial silk were now being exported. On the import side, 16 per cent. of goods were finished goods, 50 per cent. raw materials and 34 per cent. foodstuffs. Germany was also able to restore her former markets and there was no conspicuous change in the direction of trade. Of the total German exports, Europe took 75 per cent., North and South America combined about 15 per cent., Asia 7.7 per cent. and Africa 2.3 per cent. Of the total imports, half came from Europe and 30 per cent. from North and South America. There was of course some change in the relative shares of countries, but the general lines of trade remained the same.

In the latter half of 1929, after the crisis in the United States, there started a withdrawal of foreign funds from Germany and in 1930 the imports of foreign capital completely ceased. There was a

serious fall in prices in Germany and as the depression spread to other countries, German export trade and, therefore, her import trade also suffered. After England and other countries left the gold standard, and many of them introduced trade restrictions, Germany's foreign trade suffered a further serious setback. The following figures show the trade position for the years 1930-32 :

	1930	1931	1932
	(In milliard marks)		
Imports	13.1	9.5	5.7
Exports	13.1	9.5	5.7

The Tariff Policy

The tariff policy of the German states of the Zollverein became, as said before, more liberal under the influence of Prussia. Before 1850 if there were some traces of protective duties, they were meant to keep the southern states in the union. But because of her diplomatic successes at this time, Prussia went ahead with her liberal policy and duties were successively reduced. She also concluded commercial treaties with France, Belgium and Austria on the principle of tariff concessions. At the time of the founding of the Empire, the trend of German tariff policy was towards free trade and to no small extent she was influenced in this by the example of England.

When the Empire was formed, the customs union was merged in it. According to the constitution, the Empire formed one customs and commercial territory. The Empire was also given the exclusive power to legislate regarding customs. The collection of duties was left to the states and after deducting the expenses, the revenue was to go to the Empire government. This was the most important single source of revenue to it as it formed nearly one-third of its income. It was further provided that so long as other Imperial

taxes were not introduced the budgetary deficit of the Empire was to be made up by states in the proportion of their population.

In the beginning, the Empire Government continued the liberalisation of tariff as before. In 1873 all agricultural protection was abolished and at the demand of agricultural interests the iron duties were lowered and were to be completely abolished in 1877. By 1875, therefore, the Empire tariff definitely lost its protective character. In 1877 nearly 95 per cent. of imports entered free of duty. Of course there were still a few duties but they were meant for revenue purposes.

In the meanwhile the political and economic factors were working as it were to reverse the policy. Bismarck disliked the dependence of the Empire on the states for revenue and also wanted to give more stability to the Reich. But this could not be done unless the Empire's sources of revenue were increased. Unless important changes were made in the constitution, the Reich could not hope to secure additional sources except by raising import duties. Bismarck's ideas of a Greater Reich could be fulfilled only if the resources of the Empire were increased and, therefore, he was already drifting away from free trade towards protection. Further in the next few years he saw a wave of protectionism passing over European countries which raised their tariff walls. England which had prospered for a period of twenty years under free trade was faced with a serious crisis after 1873. Though in the early days of the Empire tariff was reduced, the powerful industrial interests were opposed to such a policy. In 1876 these interests had strengthened their ranks by forming the Central Union of German Manufactures whose declared aim was to combat the free trade policy of the government. Moreover it began to be argued that adoption

of protection was no departure from the commercial policy because for years Germany had stood by protectionist tariff. On the other hand free trade constituted a departure from her established policy. Thus the opinion in the country was becoming strongly in favour of protection.

The immediate cause for the departure from the Prussian free trade policy was the economic deterioration of the country after 1873. The lowering of agricultural duties in 1865 and their final removal in 1873 had led to a severe competition of imported grain and other agricultural goods mainly from Russia and the United States. The consequences of this competition were that prices fell, rents dropped and land values declined. The areas under Germany's main staples began to shrink ; and because of the migration of labour from the countryside to industrial areas there was a rise in wages and cost of production. A further shrinkage in the cultivated areas was threatened to the dismay of urban population which was solely dependent on food supplied from outside. The landlords in the east had raised a cry against the policy of the government.

The position in industries was in no way better. With the hopes of a great future bred in the German people by the victory over France in 1870, there was a scramble for starting industries and by 1873 many of them had already started working. From among them the iron industry had expanded rapidly. In 1873 the crisis affected all of them but more particularly the iron industry because of the severe English competition. The infant industry argument of List was pressed forward to demand a reversal of policy. In this they tried to secure the help of workers who were threatened with unemployment. Thus "for the sake of simplification", says Dr. Ropke, "we are entitled to concentrate our attention on two main

branches around which the protectionist movement in Germany has centred up to the present day, viz., the iron and steel industry (Schwerindustrie) and agriculture. We may even carry the simplification still further by saying that commercial policy of Germany from 1879 to almost the present day can be compared to an ellipse, the focal points of which are iron and rye".* Bismarck being a practical man could not merely be guided by the theoretical arguments of free traders. He said: "For the abstract teaching of science in this connection, I care not a straw. I base my opinion on experience, the experience of our own time". Finally he left the Liberal party wedded to free trade and joined the Centre or Clerical party inclined towards protection.

In 1879 a new tariff measure was introduced with the objects of giving protection to home industries, increasing Imperial revenue, reducing the dependence of the Empire on the states and finally bringing about an increased use of indirect taxation. It is often said that the German tariff of 1879 marked the beginning of the era of protectionism in Europe. The measure, however, was moderate from all points of view. Protection was given to some industrial-goods and agricultural commodities, prominent among them being iron, rye, wheat and oats. The moderate nature of the tariff was due to the fear of Bismarck that high duties might lead to retaliation by other countries and that thereby German export trade might suffer. He said: "The stronghold of our industry is export. Any harm pressed upon it would involve all other industries in troubles which would no longer enable them to compete abroad."

The tariff measure of 1879 had salutary effects on Germany's foreign trade. Imports decline and rela-

* William Ropke, German Commercial Policy p. 24.

tively exports increased in spite of the fact that other countries like France, Austria and Russia raised their tariff duties in subsequent years. The interests which were insufficiently protected or not protected at all were, however, clamouring for relief, for protection to some industries had adversely affected others. The position of the Imperial treasury, however, showed substantial improvement.

In the next decade little change was made in the industrial duties. But the case with agricultural duties was different. In spite of the protective duties of 1879, the American competition was still strong and prices of agricultural goods were falling. The agricultural interests which had grown in power pressed for a further increase in duties. Consequently though opposed by industrialists, duties were raised in 1885 and again in 1890. About this time the German industries had developed so much that they were in need of foreign markets. But these were being gradually closed by successive increases in import duties. In 1887, therefore, Bismarck thought of stimulating the interest of agricultural countries to buy German goods ; but this could be done only by reducing agricultural duties in Germany. The Prussian landlords, however, were so powerful at this time that Bismarck could not think of doing anything which would affect their interests.

In 1890 Bismarck quitted office and his place was taken by von Caprivi who summoned up courage to achieve what Bismarck could not do. He saw that the position of the country demanded a change in policy. In 1892 the commercial treaties which Germany had concluded previously were coming to an end and the countries concerned had declared their intention to denounce them. The current of protectionism in other countries, particularly France, Russia and U. S. A. was also strong and von Caprivi realised

that unless Germany was prepared to give concessions to these countries in agricultural duties, German industries would be faced with a critical situation. Moreover, the German industries had, as said before, expanded and were in need of markets. The number of workers engaged in these industries had grown and unless the position of industries became stable, the workers would be faced with unemployment. He described the position by saying that "Germany must either export goods or men."

Caprivi decided to abandon the principle of tariff autonomy and adopt a double tariff on the same lines as in France consisting of a general tariff fixed by the legislature and a conventional tariff—a lower set of duties—by the executive. The conventional duties were meant for the conclusion of commercial treaties. Consequently, a tariff bill was introduced. The agriculturists, thinking that the new policy would result in a reduction in agricultural duties, opposed the tariff bill. With the support of the manufacturers and working classes Caprivi succeeded in getting the bill passed. In the following years, therefore, Germany concluded a number of treaties by providing for mutual reduction of tariff and the most-favoured-nation treatment. In 1891 treaties were concluded with Austria-Hungary, Italy and Belgium; in 1892 with Switzerland; in 1893 with Serbia and Roumania and in 1894 with Russia. Excepting the Russian treaty all other treaties were to continue in force until 1903 and thereafter indefinitely until terminated by either of the parties by giving notice of one year.

As said previously the treaties of this period had an encouraging effect on Germany's export trade. The agrarian interests, however, continued to be dissatisfied with the Caprivi tariff. The agricultural prices continued to fall and showed that their apprehensions were justified. In 1893 they started the

League of Farmers (Bund der Landwerthe) and demanded that adequate protection should be given to agriculture, that legislation should be passed restraining the exodus of agricultural labourers to cities and that in general agriculture should be regarded the primary concern of the nation and the chief concern of the government. They forced Caprivi to resign his office in 1894 and Prince Hohenlohe succeeded him as the Chancellor. But immediately the agriculturists did not achieve anything. It was, however, certain that when the Caprivi treaties would fall due for renewal, they would agitate for a change in the policy. Thus since the last decade of the nineteenth century, commercial treaties became a feature of the commercial policy of Germany and Germany's bulk of foreign trade was carried under their provisions.

Soon after the Caprivi tariff went into effect, the movement for the reversal of the tariff policy set in. In the United States there were no signs of lowering the tariff; on the other hand, the Dingley tariff raised the level to the highest for the nineteenth century. In France and England a movement had started for drawing the colonies closer to the mother country by granting preferences. Canada had already taken steps in the direction of Imperial preference. This set Germany thinking about her own policy. As early as 1897, therefore, a discussion was opened in the Reichstag on the question of the general tariff policy. A committee consisting of thirty persons was appointed to report to the Reichstag on this urgent matter. It reported in favour of increase of import duties to a level higher than that of 1879. The recommendations of the committee were accepted. Count von Bulow who had succeeded Prince Hohenlohe in 1900 introduced a bill in 1901 to increase the agricultural and industrial duties to higher levels. The new tariff bill was passed in 1902 after heated debates.

The imported commodities were divided into 945 classes out of which only 200 were admitted free of duty. Duties on grain, livestock and meat were substantially raised. As a further concession to agriculturists minimum duties were introduced on wheat, rye, oats, barley and spelt. Duties on raw materials were reduced but on manufactures were increased. The principle of double tariff—general and conventional—was continued. Soon negotiations for concluding treaties were opened, but the task was rendered difficult because many of the countries anticipating a higher tariff in Germany had raised duties on their side on such articles as Germany manufactured. In spite of this difficulty a number of treaties were concluded between 1904 and 1905. Hence the conventional and general tariffs were put into effect from 1906. The treaties were to continue in force until 1917 and thereafter were to be continued subject to one year's notice on either side.

Thus before the Great War Germany was a protectionist country but her tariff compared to that of many other European countries was moderate. Moreover as the bulk of her trade was carried on under treaty provisions, the general tariff which was higher remained ineffective except that it gave Germany power to penalise those countries which refused to give her trade concessions.

One of the interesting features of German tariff before the Great War was the inclusion of agricultural duties in it inspite of their adverse effects on her industries. They were justified on the ground that the nineteenth century tendency of European agriculture was towards restricting the production of grain and increasing that of dairy products, fruits or livestock as in Denmark, Holland and Belgium. The German government tried to preserve the old agricultural structure by giving protection to agriculture. More-

over, the German farmers were accustomed to look to the government for help and they had lost all initiative in improving agriculture. Their one great concern, therefore, was protection. In addition there was the stock argument that Germany must be made independent of other countries in regard to her food. The result of this policy was that the production of grain increased but that of raw materials declined. She became dependent on other countries for the supply of those raw materials which she formerly produced.

As said before the industrial protection came to centre round iron and steel duties. It was justified on the basis of infant industries argument and because of the immediate effects of the depression of 1873. But subsequently when the industries were well-established and were prospering, the protection was not removed. It had, therefore, the result of encouraging combinations to exploit the home market and dump goods in foreign countries. The problem of monopolies became quite serious as may be seen from the tussle between the steel industry and the finishing industries. In one way, however, it may be argued that the phenomenal development of German industries before the war was due to the technical improvements which were made possible because of the existence of large scale establishments sheltered by protection. Germany could also develop the production of synthetic goods by giving protection.

During the Great War German trade was subjected to many restrictions as in England for the purpose of conserving resources and utilising them for the prosecution of the war. But there was a keen shortage of food and all restrictions on the import of food were removed. After the war ended, many restrictions were placed on Germany's commercial policy by the Treaty of Versailles. Moreover the depreciation

of the mark was acting as a check on imports which were also restricted by Germany's inability to pay for them.

In 1925 Germany was freed from the restrictions on her commercial policy. Since then the tendency of her tariff has been upwards. By an Act of 1925 agricultural and industrial duties were raised. To give encouragement to industries which had languished during the previous years like the automobile industry high import duties were placed. In the next four years the German industries revived with a renewed vigour, but the German agriculture passed through difficult time. The competition of Russian, American and Canadian grain produced with improved methods and at substantially lower costs proved to be harmful to the German farmers. From 1928, therefore, import duties were raised by successive stages until duties on wheat and rye were almost 300 per cent. of the import prices ; and on barley nearly 200 per cent. of the import price. But as the traditional device of tariff was not sufficient, to protect agriculture the government adopted new devices like forcing the German millers to use a certain percentage of German wheat.

But a complete departure from the time-honoured policy of restricting imports by tariff was made in 1931 when the country was faced with a serious financial situation. In that year Germany introduced a system of foreign exchange control. Consequently foreign credits were distributed among importers according to the total credits available. It has been said that Germany used this device to restrict the import of certain commodities and encourage the import of others. In subsequent years, the government intervention in foreign trade took many forms which will be discussed in a later chapter dealing with the National Socialist economic policy.

Chapter XVII
THE TRADE UNION MOVEMENT
&
LABOUR AND SOCIAL LEGISLATION

The trade union movement started late in Germany. Till the middle of the nineteenth century, the progress of the factory industry was very slow. Even though the next two decades witnessed the establishment of a number of factories, the revolutionary progress of industry, changing the economic organization of the country, came after 1871. Until then there was little awakening among workers for organization. Even if they had desired to organize, the law in many states was not favourable to them. Associations of workers for improving their conditions of work were forbidden. By an Act of 1869, this restriction was removed in the states of the Northern Confederation. In 1871 the Act was extended to the whole Empire and thus the legal obstacle in the way of labour organization was removed. But the same Act laid down such conditions that strikes and picketing were made difficult if not impossible.

In spite of the unfavourable conditions in the country, the socialist leaders attempted to organize German workers. While Bismarck was faced with a critical political situation in the Prussian Parliament, Ferdinand Lassalle, the son of a Jewish merchant, started agitation for the rights of workers. He argued that constitutions should correspond to the realities of economic life. Labour was a growing force in the economic world and, therefore, the state should give it political freedom and constitutional position which

it justly deserved. He further argued on the Marxian lines that co-operation in sale, purchase, etc. was not a permanent cure for the social evils and that the conditions of workers could be improved only by co-operative production. With a view to organize a political party with a socialist programme, he founded the Universal German Workmen's Association in 1863. But before his ideas could bear fruit, he died in Switzerland in 1864. After Lassalle's death, Liebknecht, a Marxist, led the socialist movement. He wanted that German labour movement should be brought in line with the most advanced section of the International. He succeeded in bringing over to his side Bebel, the president of the General German Union and formed at the Eisenach congress of 1869 the Social Democratic Party with a Marxian programme. Thus with the rise of a socialist party, which Bismarck was trying to ward off, started his struggle with German socialists. In 1869 the followers of Lassalle also started organizing trade unions of workers who believed in socialism.

In the same year, with the removal of restriction on the association of workers in the Northern Federation, Dr. Hirsch and Herr Franz Duncker who had studied English trade unionism, started unions of workers to secure their support to the radical branch of the Progressive party in the Prussian Parliament. Hence the unions formed by them, like the socialist unions, had a political bias which since then became a characteristic of German trade unionism.

In spite of this hopeful beginning in 1869, the progress of trade unionism was very slow in the following years. Apart from the uncertain attitude of the government towards trade union practices, the chief cause for the absence of vigorous growth was the attitude of labour itself. Workers were prepared to organize for political rather than economic purposes.

Nevertheless by 1878 there were, besides the unions linked to the liberals, 25 national and 5 local unions accepting socialist ideas and having a membership of 49,000.

In the meanwhile the socialist influence in the Reichstag was increasing. By 1877 the socialists had commanded nearly 9 to 10 per cent. of all the votes polled. In that year two attacks were made on the life of the Kaiser. This gave Bismarck the opportunity for which he was waiting. He attributed the violence to socialists and to suppress their organizations, he passed an anti-socialist law in 1878. This law remained in force till 1890. In the period of 12 years, nearly 332 societies were dissolved of which 95 were trade unions. In spite of this crusade against socialists, socialist unions continued to be formed as friendly societies. They carried on underground activity and secret meetings were held and journals were published. In 1886, it is supposed, there were 32 socialist unions with a membership of 100,000 workers. The law did not interfere with non-political unions and they continued to exist. The repression of government, however, led to an increase in the socialist vote from 493,000 in 1877 to 1,427,000 in 1890.

The law of 1878 expired in 1890 and the government allowed it to lapse and also gave up its repressive policy. On the other hand, the government gave opportunities for the organization of trade unions for the purpose of improving wages and conditions of work. By section CLII of the Industrial Code strikes and lockouts were legalised. The courts interpreted this provision in favour of combinations of workers for the improvement of economic conditions. But the unions and their representatives were held liable for acts committed on their behalf. The Code prohibited the use of physical force or intimidation, or compulsion on workers to join or preventing them from

leaving trade unions. Agricultural workers, seamen and domestic servants, howsoever, were still forbidden from forming associations.

In the next two decades, with the rapid growth of industries and the privileges conferred by the Code, the trade union movement made a rapid progress. Before the Great War, there were three principal groups of trade unions: the Hirsch-Duncker unions, historically the oldest; Social Democratic or Free Unions associated with the Social Democratic Party and the Christian Unions. Besides these there were other independent unions but their strength was small and influence negligible. The following figures show the relative strength and progress of the above three groups of unions:*

	Membership	
	1891	1912
Social Democratic or Free Unions	277,699	2,553,162
Hirsch-Duncker Unions	65,588	109,225
Christian Unions	—	344,687

The above figures show that the Social Democratic Unions were the most powerful ones with their membership accounting for nearly 80 per cent. of all the organized workers. There was no compulsion on their members regarding their political or religious faith. They were free to belong to any political party and to vote as they liked. They believed in the inevitability of class conflict. Though the social Democratic Party tried to secure their leadership in the beginning, it gave up this aim later on and the relations of the two movements became amicable with advantages to both. The unions of this group were highly organized into 64 national federations. In

* Jones, *Workers Abroad*, p. 98.

their turn, the federations were centralised in a committee consisting of delegates from the constituent federations. The central committee kept control over funds and when necessary sanctioned strikes. As the contributions of members were high, the financial position of the unions was sound. In 1911, the figures of income, expenditure and accumulated reserves were £ 3,600,000, £ 3,001,000 and £ 3,105,000 respectively. More than three-fourths of the federations paid travelling allowance, unemployment and sickness benefits and funeral expenses. In the large cities, the federations maintained central offices with labour registries, inquiry offices, lodging houses, reading rooms and libraries. Lastly, it may be also pointed out that women workers had formed their separate trade unions and in 1906 there were 37 such unions with a membership of 118,908.

The Hirsch-Duncker unions were originally started to support the programme of the radical branch of the Progressive Party. By 1914, however, they gave up their political activities and devoted themselves to the work of economic betterment of workers. They did not believe in the class antagonism and, therefore, were non-socialistic in outlook. In fact after 1875, their organization was similar to that of the Social Democratic unions. Their financial position was sound as may be seen from the figures of income, expenditure and accumulated reserves in 1911: income was £131,000, expenditure £115,000 and accumulated reserves £ 213,000. Their members mainly came from the metal and engineering trades and the unions were chiefly confined to Silesia and eastern Prussia.

The Christian unions were started by Bishop Ketteler, a follower of Lassalle, to organize Catholic workers. Thus they were a part of the Catholic social movement. They did not believe, like the Hirsch-Duncker unions, in class antagonism and considered

that strikes should be used only in exceptional circumstances. They, however, wanted to improve the conditions of workers by peaceful means and by mutual benefits. In the beginning their membership was small but after the impetus given by the papal encyclical of 1891, the progress became more rapid. In 1911 their income was £ 312,000, expenditure £ 264,000 and accumulated reserves £ 354,000.

In the remaining unions, mention may be made of the Independent unions, the Yellow unions encouraged by employers and Polish unions started on a racial basis. As said before, their influence was negligible.

All the German trade unions were distinguished for their welfare activities. In addition to giving sick pay and unemployment benefits, they had devoted a good deal of attention to the education of workers and their children. There were workingmen's schools and colleges where education was imparted to labourers and their children. The library organization was widely spread and all important cities had worker's libraries. Berlin provided 50,000 volumes for their reading. Like the German government, trade unions conducted enquiries into hours of work, wages and conditions of work with a view to collect statistics to prepare their case for economic betterment. There was no industrial town in Germany which did not have a newspaper conducted for workers. The total circulation of such newspapers was about 2,500,000. As the children of workers were the pillars of the Germany of future, attention was given to their physical and intellectual development. In addition to schools, for them there were club rooms with sports facilities. Lastly, the German unions had organized what was known as the 'labour secretariat'. On no ground the ignorance of law on the part of the workers could be excused and, therefore, the work of the labour secretariat offices consisted in giving informa-

tion to them on all general matters including law. In 1910 there were 410 such offices. Thus the welfare work undertaken by the German unions was comprehensive.

The relations of the leading groups of unions were not generally very cordial. They were separated from each other widely because of their differences in ideas and policies. The fundamental cause of the lack of unity was their attitude to socialism. Other factors which were working for schism among them were their political affiliations, ecclesiastical aims and occupational, geographical and racial interests. In spite of these permanent differences, they came closer whenever a common danger faced all of them.

The attitude of the employers to trade unions was the same as in other countries. When the labour organization began to spread, they closed their ranks by forming trade associations which were centralised into federations. The most powerful organization of capitalists was the Central Union of German Industrialists. It was dominated by the coal and iron and steel manufacturers. The opposition of the employers to trade unions was the strongest in those industries in which the control was centralised in cartels. Thus the workers met with the greatest opposition in the coal and iron steel industries which were the first ones to show the development of concentration movement. But these were also the industries in which workers were paid well and provided with better amenities of life and work. The employers' weapon against workers was the boycott of unionists. A 'black list' containing the names of workers to be refused employment would be sent round to different factories and those who happened to be included in that list had little chance of securing employment easily. "The leaders of industry", says Jones, "had not accommodated themselves... to the existence of workers'

organizations, and had shown far greater capacity to build powerful organizations of their own. Some of these leaders regarded the complete subjection of the workers as the only desirable basis of industrial order and occasionally were frank enough to say so. In any event, they made among themselves arrangements, in which they were sometimes detected, to black-list workers who played any important part in the labour movement.”*

During and After the Great War

When the war broke out, the trade unions tried to maintain an attitude of neutrality, but gradually impelled by the force of nationalism they drifted towards co-operation with the government. Even the Social Democratic Party voted in favour of co-operation. Only the more radical elements opposed the war. To obtain the trade unionists' support, the government gave trade unions full recognition and put their representatives on the food control and other committees. There were no doubt a few strikes undertaken by the extreme radicals, but they were easily suppressed with the help of the remaining labour force.

This early enthusiasm of the workers began to fade out as the war was prolonged and Germany's chances of winning it appeared to grow less and less. The Social Democratic Party became more restless. In 1916, the majority declared itself in favour of the continuance of the war with new aims. But the minority which consisted of radicals deserted the majority and openly declared itself opposed to the war. These two groups, which held divergent views in 1916, sunk their differences after the Russian Revolution of March, 1917 and the entry of the United

* *Ibid.* p. 98.

States in the war, and demanded of the government that it should declare a policy which would bring to Germany 'peace with honour'. In 1917 the government declared from the Reichstag that it would be prepared for 'peace by understanding'. The radicals, however, were not satisfied with it. They started organizing workers' and soldiers' councils on the Russian model. The revolutionary socialists found that the economic conditions were in their favour and launched a number of strikes. Finally, they succeeded in overthrowing the Hohenzollern monarchy just two days before armistice. For sometime thereafter it looked as if Germany would follow in the footsteps of Russia in establishing a socialist state. But the vote of the nation on January 19, 1919, shattered the hopes of the minority socialists. In the elections to the constituent assembly they secured only 2.3 million votes out of a total of 30 million votes ; the majority socialists secured 11.5 million votes and the bourgeois parties 16 millions. The majority socialists secured 163 seats in the assembly, but the minority only 22. With the help of other parties, the majority socialists were able to secure a working majority. Thus government again passed into the hands of the moderates.

The events of 1918 had a profound effect on the growth of trade unionism. The membership of socialist unions rapidly increased from 1.6 millions in 1918 to 7 millions in 1919. In the next few years the growth of trade union membership in general was phenomenal because, firstly, in 1918 the employers had recognised the trade unions as the sole representatives of workers and also the eight-hours day in principle and secondly, the republican atmosphere was very favourable to their growth. The membership of the three groups of unions in 1923 was as follows ; 9 millions, Social Democrats ; 2 millions, Christian unionists ; and 650,000 Hirsch-Duncker unionists.

In the meanwhile the organization of trade unions was reformed with a view to abolish all differences between the skilled and the unskilled members. In June, 1919 it was decided at the Nuremberg conference to federate all socialist unions into a single organization, the General Federation of German Unions. The constituent unions were left free as far as their internal organization and policies were concerned. The members of the G.F.G.U. constituted nearly two-thirds of the total organized workers. Similarly the Catholic and other Christian unions entered into the Federation of Christian Trade Unions of Germany in 1919. The Hirsch-Duncker unions formed the Federation of Liberal Hirsch-Duncker Unions. The political affiliations of these three groups with the Reichstag parties were with the Majority Socialists, the Centre Party and the Democrats respectively.

Another development of the trade union movement of this period was the beginning made by agricultural workers in organization. Until 1919 they did not enjoy legally this privilege. Unions were formed particularly in the eastern Germany where agriculture was organized on capitalist lines. In 1920, there were 9,000 unions with a membership of 700,000. In that year they organized 'red guards' to terrorise the Junkers. They were, therefore, abolished by the government.

In 1923 the position of the trade union movement appeared to be strong. Politically they were one of the strong supports of the Republic. In 1923 Count Kessler wrote : "They (the trade unions,) stand to-day, as in 1920, for the Republic. They stand for it, not only because it has given them more rights and greater power but also, and principally, because it has given them a new sense of self-respect and dignity . . . So long as the trade unions retain their present mem-

bership and organisation, and so long as this (moderate) type of workman leads them, the Republic could not... be overthrown".* Thus the existence of the Socialist Republic depended on the support of the trade unions. But what new rights did they get because the socialists were in power? It is known now that though the German socialists theoretically believed in Marxism, they did not do anything to overthrow the capitalist yoke. They contented themselves with a mere reformist programme and curiously enough the trade unions supported them.

The earliest success of the trade unionists in the new order was achieved in 1918, when the employers' federation seeing that labour had achieved great political power accepted the programme of the General Committee of the Trade Unions containing the following points: the complete recognition and freedom of trade unions; the drafting of collective agreements; the establishment of works committees to supervise their fulfilment; and the introduction of an eight-hours day. In a way this could be regarded as a triumph of the trade unions because of the former hostile attitude of the employers. But compared with the objectives of the socialists who were dominant in trade union organizations the demands look ridiculous.

Further by an Act of 1920 works councils, district councils and a National Economic Council were started for dealing with problems affecting employment, labour conditions and other related problems. The works councils had the power to appoint a director on the boards of directors of the enterprises with which they were connected. In the beginning the trade unions looked upon the works councils with suspicion as unnecessary organizations in which non-trade

* Ogg and Sharp, *Economic Development of Modern Europe*, p. 789.

unionists might be concerned ; but this suspicion was soon overcome and the trade unions co-operated with them. The National Economic Council had the appearance of a sort of parliament of industry, but actually it had very little power beyond giving advice and certainly had not the force and power matching those of the Reichstag.

Another development of the Social Democratic regime was the introduction of a scheme for arbitration and conciliation. It was introduced in 1918 and was elaborated in 1923. According to it a collective agreement could be imposed on those employers who were not a party to it. The trade unions accepted the scheme and abided by it. Hence in the next few years there were a small number of strikes. In addition to this, the introduction of an unemployment insurance on a limited scale in 1922 and then on a national basis in 1927 served to bring about more harmonious relations between labour and capital. The one issue on which, however, they had some conflict with capitalists was the introduction of an eight-hours day. After making a beginning with the eight-hours day, the powerful industrial magnates like Thyssen, the head of the steel organization, opposed it and by 1923 it had ceased to be effective. In 1928, however, the government restored it by an Act. This action of the government in face of the threats of the powerful steel interests to close down their plants may be regarded by labour as another victory for them. Thus in the Social Democratic regime the power of capital was curbed but not destroyed and, therefore, all the hopes that were raised in the minds of those who brought about the revolution of 1918 were never realised.

The trade union movement had established itself in Germany in the post-war years, but its membership was fluctuating in periods of prosperity and depression. Between 1929 and 1932, the membership declined

because of the effects of the depression on industry. The German workers were also still smarting under the treatment meted out to them by the victorious Allies and had felt little satisfaction at the way the Republic was dealing with capitalism. This dissatisfaction of workers among other factors no doubt paved the way for the rise of National Socialism.

When the National Socialists came to power, probably with the help of powerful industrial interests, all the German trade unions were dissolved by an order of May 2, 1933 and soon a German Labour Front was created. Originally only the German labourers were its members, but by the Leipzig agreement of 1935 employers were also admitted to its membership. Thus the much coveted object of the German industrialists, the suppression of trade unionism, was achieved by the National Socialists on the ground of abolishing class distinction, raising the standard of efficiency of the German workers and industries and fostering national interests.

Labour Legislation

Protective legislation for industrial workers came late in Germany. Each state had its own separate legislation before the Empire was founded. Even when legislation was undertaken, it lacked the elaborateness of English legislation because of the desire of the government not to interfere with the relation of the employers and workers. As early as 1818 the attention of the Prussian minister of public worship and instruction was drawn to the exploitation of child labour in the textile industry, but he did not take any steps fearing that governmental interference would discourage industrial progress. But when the matter could not be ignored any more, the King ordered an enquiry in 1825 and asked for recommendations to improve the conditions of workers. But the

enquiry was carried on in a very leisurely manner and a report was submitted in 1832. Action was taken on the report in 1839 only when a reformist movement was started in Prussia to wake up the government to the importance of factory regulation. The main points of the Act of this year were: it prohibited the employment of children under 9 years; also prohibited the employment of children between the ages of 9 to 16 years between the hours of 9 P.M. to 6 A.M.; limited the hours of work for children under 16 years of age to 10 hours a day; and prescribed 5 hours of compulsory schooling for such children. The enforcement of these restrictions was left to local police teacher and clergymen. No wonder the law proved to be a failure.

An enquiry into the working of the law of 1839 held in 1851 showed that the workers' condition remained as miserable as before. In 1853, therefore, the previous measure was replaced by another. It raised the minimum age of employment to 12 and limited the hours of work and schooling for children under 14 years of age to 6 and 3 respectively. It also provided for the appointment of inspectors to enforce the Act. Compared to the then state of factory legislation in England, the law of 1853 was certainly more advanced, but for all practical purposes it was useless as its enforcement was rendered difficult by the opposition of factory owners and by the weakness of the government to take measures against them.

The conditions in other states were similar to those in Prussia. Restrictions on the employment of children were placed in the states of Bavaria, Baden, Wurtemberg, Hesse and Saxony, but they could not be enforced.

In the meanwhile the establishment of factories progressed rapidly and the workers employed in them worked long hours, accepted low wages and put up

with unhealthy conditions. A few years before the Empire was founded, the need for a more comprehensive legislation was felt. When the North German Confederation was formed in 1867, uniform legislation applying to all the states included in it was passed. The Industrial Code of the Confederation provided for the enforcement of the Prussian legislation of 1839 with certain improvements and required the factory owners to install safety devices to protect health and life of workers. Though the number of inspectors was increased, the machinery of enforcement was still inadequate for the growing number of factories. Thus before the Empire was founded, factory legislation in all the states was hopelessly inadequate. No provision was made for the regulation of the conditions of workers and even the restriction regarding child labour could not be fully enforced.

After the Empire was founded, as said before, the industrial progress of Germany became astoundingly swift. The number of factories increased. There was an exodus of population from the countryside to the industrial cities. An army of men, women and children was employed in many of the hazardous occupations in industries. The number of lives lost from accidents became disconcertingly large. With the high cost of living in cities and low wages the standard of life of the workers in certain areas declined. At the same time the growth of socialist organizations and their political activities pressed upon the government's attention the need for the extension of factory legislation to include atleast women, provision of devices to prevent accidents, payment of compensation to workers injured by accidents and a more effective enforcement of law.

The attitude of the Empire government to labour problems was influenced by Bismarck's ideas. He was never in favour of compulsorily improving the

conditions in factories because he believed that law could be easily evaded and that there would be no direct gain to workers. He thought that what the worker in modern factories required was a provision of insurance against sickness, accident, old age and unemployment. Such insurance would provide him against all the vicissitudes of industrial life. It would also indirectly lead to an improvement of factory conditions voluntarily by the employers. He, therefore, paid little attention to factory legislation except that in 1878 a law was passed to place the responsibility on employers for the payment of compensation in case of accidents if they were not the result of worker's negligence and an administrative law was passed providing for the inspection of factories, mines and quarries throughout the Empire. The appointment of inspectors and the regulation of their work was left to the states but to bring about uniform conditions, a set of regulations was issued by the Bundesrath. The state governments followed closely the regulations of the Empire government. Thereafter no attention was given to this aspect of labour problem but in the next decade Bismarck proceeded with his social legislation programme. Laws were enacted for the introduction of sickness, accident, and, old age and invalidity insurance.

The agitation of workers for the improvement of factory conditions finally bore fruit in 1891. In that year an International Congress to consider labour problems was held at Berlin which made certain recommendations. They were considered by the Reichstag and its decisions were embodied in an Industrial Code of June, 1891. Its main features were : prohibition of the employment of children under 13 years of age ; those who were above 13 years of age could be employed only if they had completed elementary education ; establishments employing children under

18 years were subjected to special restrictions to protect their health and morals ; children were not to be employed in dangerous industries ; the law was made applicable to workshops and some home industries ; finally the inspectors were given more powers to protect women workers and apprentices in hotels and taverns and to enforce a Sunday rest.

Before the Great War the factory legislation mainly consisted of the Code of 1891 as amended from time to time. The employment of children under 13 years of age was prohibited and the hours of work of children between 13 and 16 years of age and women workers were limited to 10 hours a day exclusive of rest hours. They were also not to be employed in the night time. There was no such restriction on the hours of the work of adult male workers. The Code also required employers to take steps to protect health and life of workers. The law was applicable to factories and workshops excluding mines, quarries, state industries and railways, fisheries, agrarian and forest industries, and building industry. Separate regulations were provided for these industries. The Code was applicable throughout the Empire, but its enforcement was left to the states and, therefore, the results achieved depended on the energy of inspectors responsible to the state governments.

Comparison of factory legislation in Germany and England, the two great competitors in Europe, is bound to be superficial because while Germany had made up the deficiencies of factory law by introducing social legislation nearly thirty years before the war, in England just a beginning was made by the National Health Insurance Act of 1911. England was in some respects ahead of Germany, while in others she was behind her. While in England the minimum age of employment was 12, in Germany it was 13. But like England, there was no necessity in Germany to prove

the age of children before they were employed. In England the protected age extended to 18 years; in Germany to 16 years only. Moreover, the provisions relating to the employment of women workers in Germany were not as detailed as in England. As in Germany, the provision regarding statutory holidays did not apply to adult male workers in England. In both the countries the law made no provision regarding the regulation of work of adult male workers. But considering the whole field of protective legislation, the German worker was better off than the English.

In the post-war years the law was amended from time to time. Before the rise of National Socialism, the main outline of the law was as follows: children were prohibited from being employed in industries or workshops worked by steam, gas, electricity, etc., if less than 10 adult workers were engaged in them or in building trade, brick making, mining, or in any underground employment or in any employment generally considered harmful to children such as glass-blowing or in industries connected with the working of lead, copper or zinc, or in colour factories and the meat trade. Their hours of work did not exceed four. They were also given two hours of rest at mid-day. After the close of the Great War as remarked before, the working day of adult workers consisted of eight hours. Provision was made for rest periods. The restrictions regarding women were more stringent. They were not allowed to be employed in establishments where machinery was used after 8 P. M. and before 6 A. M. on all other days excepting on Saturdays when they were not to be employed later than 5 P. M. Where two shifts were being worked, women were allowed to be employed upto 10 P. M. but it was necessary that 16 clear hours must have elapsed before they could start work again. Women with household duties over 16 years of age

were to be given a longer period of mid-day rest. There were also provisions regarding health and safety of workers.

When the National Socialists assumed power an elaborate system of labour regulation was introduced by the law for the Regulation of National Labour of January 20, 1934. The law declared that its objects were to introduce the leadership principle and to abolish class-war and to make workers and employers work together in the interests of the nation. The first salient feature of this law is that it provides for the formation of Mutual Trust Councils in all concerns employing more than 20 persons. The Council consists of the employer (the leader) and from 2 to 10 representatives of workers. It functions merely as an advisory body ; and its chief task is to establish mutual confidence between workers and employers. Its other duties are : to increase efficiency of workers ; to assist in the framing and application of works regulations ; to settle disputes ; and to help in the fixing of fines.

Secondly, it empowers the government to appoint Labour Trustees whose decisions shall be final on all matters. Thus they take the place of the old system of bargaining between employers' associations and trade unions. Their work consists of : laying down general works regulations according to which employers are required to frame their works regulations ; issuing of wage schedules ; approving of collective dismissals (i.e., over ten per cent. of the employees) ; and reporting to the Ministry of Labour on the political and social development of workers. There are fourteen Labour Trustees appointed for the fourteen industrial districts of Germany. They are advised in their work by two advisory committees.

Thirdly, every concern employing more than 20 persons must issue works regulations regarding :

working hours; wages and salaries; schedules for calculating piece-work wages; type, amount and exactions of fines; grounds on which employment could be terminated without notice and the utilisation of forfeited remuneration. The works regulations in the various industrial concerns in effect constitute the factory law. The standard wage schedules are fixed by Labour Trustees. In 1934-35 nearly 1700 wage schedules were issued by them.

Fourthly, every worker is expected to devote all his energies to the good of the concern and also to the common good of all workers. If he becomes lax or is found wanting in some respects, he is dealt with by the Courts of Social Honour. Each industrial district has such a court. In addition there are Labour Courts to deal with cases of wrongful dismissal.

In addition there are a number of decrees and laws meant to control labour. By a decree of 1935 emigration of skilled workers and technicians is prohibited without the permission of the Minister of Economic Affairs. By the law for the Regulation of the Supply of Labour of 1934 the districts of high unemployment could be declared as 'closed zones' against the immigration of labour from other areas. Similarly very wide powers have been given to the Reich Labour Exchanges regarding the distribution of labour. Thus workers have been subjected to minute regulation by the state and the liberty which they had won after a struggle lasting for three quarters of a century has been lost. What a fall there has been from the ideals which Marx and Lassalle had cherished when they had started the revolutionary socialist movement in Germany in the second half of the nineteenth century!

The average hours of work in the German industries prescribed by the collective rules issued with the consent of Labour Trustees have been eight per

day. According to the results of 16,576 inspections of undertakings by Labour Front officials acting as factory inspectors, 2 per cent. of the undertakings visited worked less than 40 hours a week on the average, 12 per cent. between 40 and 47 hours, 59 per cent. 48 hours, and 27 per cent. more than 48 hours. The index of wages fixed by the Labour Trustees was as follows :

Index Number of Industrial Wages *
(money and real)
Base : 1929-100
(Hourly rates)

	Money wages	Real Wages
1932	82	104
1933	79	104
1934	79	101
1935	79	99
1936	79	98

The above figures show that though money wages were lower than in 1929, the real wages were remarkably near the level of 1929. This was no doubt due to the control of prices. There was a slight fall in the real wages in 1935 and 1936 which must be explained by the rise in the cost of living from higher prices.

The collective rules also made provision for the protection of children and women workers. Holidays with pay were also provided according to the length of active service. Thus according to the rules issued in the Rhine district in 1936, workers over 18 years of age were allowed 6 working days after 9 months' service ; apprentices and young persons were entitled to a holiday consisting of 9 to 12 working days according to age and length of apprenticeship ; and war-cripples and persons disabled in industrial accidents were entitled to at least 18 days' holidays.

* I. L.O. Year, Book, 1936-37, p. 289.

Social Insurance

Germany was far ahead of other countries in the establishment of social insurance schemes for workers. Bismarck who introduced them is said to have been inclined towards state socialism which accepted the established government but wanted it to undertake a reformist programme. The circumstances which led him to introduce these schemes lay in the economic and political development of Germany in the second half of the nineteenth century. After 1850 Germany was dotted with modern factories but their tentacles spread widely after 1870. The number of men, women and children, as said before, engaged in these factories increased vastly and the evils which were noticed in England a century before appeared in their ugly form. Bismarck was not slow to perceive the effects of industrial capitalism on workers. At the same time when this transformation of the country was going on, the influence of socialism on the German people was spreading. While Liebknecht and Bebel were preaching revolutionary Marxism, Lassalle was content with advocating a reformist programme, aimed at the introduction of universal manhood suffrage and state support to workmen's productive associations. Bismarck was influenced by Lassalle about whom he said that he was "one of the cleverest and most agreeable man he ever met". After Lassalle's death, however, the socialist movement passed into the hands of Liebknecht who formed the Social Democratic Party in 1869. Bismarck saw the danger to the established government and economic order if revolutionary socialism spread among workers which it was likely if the workers' conditions were not improved. When the Empire was formed, the universal manhood suffrage was introduced with the result that the number of socialist votes increased. Moreover, in 1872 a conference of economists, profes-

sors, administrators and jurists which met at Eisenach drafted a manifesto with the help of Professor Schmoller and Professor Wagner urging the government to undertake a programme of social amelioration to "enable an increasing number of people to participate in the highest benefits of civilization". Bismarck for a time thought of killing the growth of socialism and attempted to form a European combination against it, but failed because of the lack of support from England. In 1874 he tried to muzzle German socialism by a press law but was foiled by the liberal party in the Reichstag. Finally he got his opportunity in 1878 when after an attempt was made on the life of the king, he came out with the 'exceptional law' to suppress all socialist organizations and their activities.

Though Bismarck tried repression, he was alive to the importance of winning over workers to the side of the government by giving them protection against all the vicissitudes of industrial life. He thought that workers would be weaned away from revolutionary socialism if he gave effect to the programme of state socialists. His action in this direction would have also received the support of the humanitarians and lent strength to the Empire. He selected only those items of the programme which suited his purpose. The policy which the state adopted was stated at the time when the accident insurance bill was introduced in 1881: "That the state should interest itself to a greater degree than hitherto in those of its members who need assistance, is not only a duty of humanity and Christianity—by which state institutions should be permeated—but a duty of state-preserving policy, whose aim should be to cultivate the conception—and that, too, amongst the non-propertied classes, which form at once the most numerous and the least instructed part of the population—that the state is not merely a necessity but a beneficent institution. These classes

must, by evident and direct advantages which are secured to them by legislative measures, be led to regard the state, not as institution contrived for the protection of the better classes of society but as one serving their own needs and interests. The apprehension that a socialist element might be introduced into legislation if this end were followed should not check us. So far as that may be the case it will not be an innovation but the further development of the modern state idea, the result of Christian ethics, besides the defensive duty of protecting existing rights, the positive duty of promoting the welfare of all its members, and especially those who are weak and in need of help, by means of judicious institution and the employment of those resources of the community which are at its disposal. ****

The social insurance programme became a part of the general public policy directed towards the betterment of the lower classes of society. This could be seen from the care which the state bestowed on the education of its children. The state regarded that every German citizen had a right to elementary school education at public cost. In Germany, therefore, education was compulsory for boys and girls between the ages of 6 and 14. The education imparted was not merely academic in the usual sense of the word but consisted of an elaborate programme of practical training in arts and crafts and of physical culture. The state did not stint in spending on the provision of nutritive food and books to the children of the poor. The German state regarded that every man, woman and child was an asset to itself and that in their neglect the community suffered a loss. The aim of public policy was to make every man a good soldier and a

* Ogg and Sharp, *Economic Development of Modern Europe*,
p. 549-50.

self-supporting and useful citizen; every woman a model housewife and mother.

Though Bismarck introduced social insurance schemes on a national scale, relief provided by them was given to workers in one form or another by state legislation or by private agencies before the Empire was founded. Thus in Prussia a statute of 1838 provided compensation to the workers on the railways for accidental injuries. This principle was extended to mines, quarries and factories by a law of 1871. But the burden of proof lay on the workers and, therefore, the law was of little use to them. Similarly, gilds and associations of journeymen provided help to their members in sickness. The Prussian government legalised and encouraged this system by statutes of 1845, 1849 and 1854. By the Act of 1854 local authorities were also empowered to require employers of certain classes to contribute half the cost of insurance and also to undertake the formation of insurance societies. Thus the principle of obligatory insurance was introduced in Prussia. In other states like Saxony, Bavaria, Baden and Wurtemberg provision for relief was made by law.

Bismarck's first insurance measure was the Accident Insurance Bill introduced in 1881, which having failed to pass twice, was enacted in 1884. It came into force from October 1, 1885. The second measure was the Sickness Insurance Bill tacked on to the first. Though the Accident Insurance Bill failed to pass, in 1883 the Sickness Insurance Bill was adopted by the Reichstag. The third measure was the Old-age and Invalidity Insurance Bill which was introduced in 1887 but which was delayed for some time because of the death of William I. It became law in 1889 and was put into force in January, 1891. These three laws were modified from time to time in the light of experience of working them and were finally embodied in a

Workmen's Insurance Code of 1911. It covered nearly the entire industrial working population of Germany, a unique system not found in any other industrial country. Its effect on the industrial growth of the country was expressed in 1906 by Count Posadowsky, the Imperial Minister of Interior in the following words : "If Germany has just experienced a vast industrial expansion equalled by no other country in the world during the same time, it is chiefly due to the efficiency of its workers. But this efficiency must inevitably have suffered had we not secured to our working-classes, by the social legislation of recent years, a tolerable standard of life, and had we not, so far as was possible, guaranteed their physical health."*

As provided by the Code of 1911, the accident insurance was applicable to nearly all workers and superior staff drawing salaries of less than 5,000 marks a year. Every employer was required to be a member of a mutual insurance association. The funds for the scheme were entirely provided by employers. The state guaranteed the solvency of the insurance associations. The law also laid down the conditions for eligibility to receive benefits under the scheme. The scheme provided for the following benefits : (1) all expenses of medical attendance including surgical operation ; (2) cash benefit being a percentage of wages for varying periods according to the extent of injury ; and (3) in cases of accidental death, burial expenses and pension for widow, children and dependents. The number of persons covered by the accident insurance increased from 3.2 millions in 1885 to 21.1 millions in 1907 ; in 1933 the number was estimated to be 22 millions. There has been no sub-

* *Ibid.* pp. 444-445.

stantial change made in the provisions of the law until recent years.

The sickness insurance as provided in the Code was applicable to all workers whose income or wages were below 2,000 marks a year. Later on the limit was extended to annual incomes upto 3,600 marks. Every workman was required to be a member of an insurance society. Funds were raised from contributions by employers and employees. The rates of contribution varied from area to area and from industry to industry according to their nature. But generally employers and employees contributed in the proportion of one-third and two-thirds. The scheme provided for the following benefits : (1) medical and surgical treatment, hospital and home care and burial expenses in the event of death ; (2) medical attendance for wife or husband, as the case may be, and children, if half the cost of medicines was paid by the insured member ; (3) cash allowance to the member the amount of which varied according to the length of illness ; (4) cash allowance to wife and children ; and (5) maternity benefits to female members for four weeks before and six weeks after childbirth. The total number of insured persons in 1907 was 12.1 millions ; in 1933 the number had increased to 16.8 millions.

The old-age and invalidity insurance of 1891 extended in 1911 to include survivors' insurance, i.e., the insurance of widows and orphans. The provisions of the Code relating to old-age and invalidity required every worker above the age of 16 and certain salaried employees with annual incomes below 2,000 marks to insure against old-age and invalidity. The necessary funds were raised from equal contributions from employers and employees and a grant by the state. The benefits consisted of : (1) an invalidity annuity when by permanent invalidity a member's earning

capacity was lost to the extent of two-thirds (now one-third) : and (2) an old-age annuity to all the members attaining the age of 70 (now 65). The survivors insurance though combined with the old-age and invalidity insurance was a separate branch. It provided the following benefits : (1) three-tenths of the deceased husband's pension plus an Imperial subsidy of 50 marks to an invalid widow so long as she remained unmarried ; (2) similarly an Imperial subsidy and pension to orphans until they attained the age of 15. There was a limit to the total pension so payable.

In 1911 an insurance system for the salaried employees was introduced. It applied to all persons, clerks, managers, etc., whose salary did not exceed 5000 marks a year. Recently the limit has been raised to 7,200 marks per year. Many of the persons affected by it were already insured in other schemes but the new scheme was supplementary and compulsory. Employers and employees gave equal contributions. It provided members with a pension on attaining the age of 65 or on being disabled. Similarly pensions were provided for orphans and widows.

One aspect of social services rendered before the Great War which must be particularly mentioned was the attention paid to the tuberculosis patients. In the early years of the working of the invalidity insurance it was noticed that nearly 13 per cent. of the annuities granted to men and 9.6 per cent. of those granted to women were to tuberculosis patients. By a law of 1899, therefore, insurance societies were required to make arrangements for the treatment of these patients in tuberculosis sanatoria as they were capable of being cured in the early stages. By 1909 there were about 150 sanatoria. Between 1899 and 1909, the total number of patients treated in them was 273,000. The mortality figure fell from 23.08 per thousand for the

period 1895-99 to 18.45 per thousand for the period 1905-09.

Germany was confronted with the problem of unemployment which has become a common feature of all the industrial countries. The devices which she adopted to combat it were three: (1) labour exchanges; (2) home-lodging houses and public relief stations; and (3) insurance against unemployment. In the beginning labour bureaus (or exchanges) were managed on private basis. The first labour bureau of this type was started in 1865 in Stuttgart by the Workingmen's Improvement Society. It was then copied in many other cities. Very shortly these bureaus were converted into municipal bureaus and by 1907 there were 315 municipal bureaus. In addition there were labour bureaus started by trade unions, gilds and non-officials. They were very useful in finding work for the unemployed. The number of persons who found work with their aid varied between 50,000 to 1,000,000 every year. By the end of the century, Wurtemberg made a beginning, and was followed by Bavaria, Baden and some other states, in organizing state unemployment bureaus. They were also grouped into regional associations and finally into a voluntary association for the Empire. Thus these institutions were very useful to workers. In spite of their work, a large number of persons were bound to remain unemployed under the modern industrial conditions. They might have to wander from place to place in search of jobs. To provide them with food and shelter, the home-lodging houses, which were private enterprises, and public relief stations were started. In the first food and shelter was provided without any cost; in the latter in return for work. In both the cases a certificate of recent employment was required before anybody was given help.

The unemployment insurance was begun in Ger-

many by municipalities. The first experiment was made by Cologne in 1894. This experiment proved to be a great success and was copied in other cities. Though Bismarck did not make an attempt to start unemployment insurance on national scale, in the beginning of the twentieth century, states were being pressed to organize state schemes. But none of them could undertake it because of the financial risks involved in it. In the disorganized economic conditions in the post-war period again a demand was made of the government which consisted of socialists that a nation-wide scheme should be introduced by it. After long deliberations, a national scheme was introduced in 1927.

The present unemployment insurance scheme applies to all those workers to whom the sickness insurance applies with the exception of certain classes. Contributions are paid by employers and employees in equal proportion. Workers' contribution in 1936 was 6 1/2 per cent. of the basic wage. An unemployed worker is paid a cash allowance for a limited number of weeks after he has paid a certain number of contributions. Workers over 40 years of age are paid benefits for longer periods. With the sanction of the Labour Minister short time grants are also given. The insurance against sickness also continues to run during the period of unemployment.

The National Socialists continued all the four insurance schemes with certain modifications regarding benefits and their duration. In 1934 an Act was passed to consolidate all the systems. To supplement the social insurance benefits to workers in certain cases, they started a voluntary organization known as the National Socialist People's Welfare Organization (N. S. V.) Its activities consists of : care of mother and child, child welfare, unemployment assistance, war victim relief and care of the rentier, aged and

infirm. It has the largest membership of any voluntary relief organization in the world, in 1935 it was 4,700,000. The organization maintains 13,000 creches and 500,000 beds.

Chapter XIX

• THE EFFECTS OF THE GREAT WAR

At the beginning of the Great War, Germany was strong, united and prosperous and was one of the three principal industrial nations of the world. She had left France behind and had surpassed England in the production of iron and steel, machinery, electro-technical products and chemicals; she was behind England only in the production of coal and cotton textiles. From an insignificant position her merchant fleet had expanded to a considerable size and was capable of competing with the established English lines. Her foreign trade had grown rapidly in the previous decade and was only second to that of England. She had also lent capital to other countries and was regularly receiving income from it. German banking had spread beyond the national boundaries and was helping German foreign trade. All these results were achieved by Germany in about forty years' time.

The war had, however, devastating effects on Germany. When the armistice was signed she was in a state of complete economic, physical and political exhaustion. She had lost her foreign trade and in addition incurred indebtedness in foreign countries. Her agriculture and industry were in a hopelessly disorganized condition. For four years Germany lived on capital. Agriculture was made to produce as much as it could, but no attention was paid to the deteriora-

tion of soil. Many of her industries which depended on foreign supplies of raw materials were either closed or were partially working. In 1918 there were 7,000 substitutes in use for food and clothing. Excepting the iron and steel and coal industries, all others were in a desperate condition. In addition to the loss of economic resources, she had lost considerable manpower. The number of Germans killed was 1.8 millions and that of wounded 4.3 millions. In all, it amounted to 17.03 per cent. of her military personnel. Even those who survived were in a state of physical exhaustion. The sense of defeat had crushed all the hopes that they had entertained about the future. Even the civilian population had suffered in health and standard of living. The terrible effects of the war on the population were seen in the fall of the birth rate from 28.3 per thousand in 1913 to 14.4 per thousand in 1917. On top of this the revolution of 1918 made for a time the political future of Germany uncertain.

But there was one aspect of the economic situation in Germany which threatened greater disorder in the future. It was inflation of currency. When the war ended Germany was already on the road to inflation. The way for it was paved by the currency measures of 1914 and the policy of financing the war. After the war broke out, the German Government took the following steps in the currency field : (1) suspension of the obligation of the Reichsbank and private note-issuing banks to make specie payments ; (2) establishment of loan offices authorised to issue paper money as an advance on paper securities and goods ; and (3) authorising the Reichsbank to issue paper currency with the cover of treasury bonds and bills. Thus all checks on the issue of paper money which in normal time keep its value stable were removed to help the government finance the war by securing purchasing power with ease.

Germany also followed a policy of financing the war different from that of the other European belligerents. She believed that the war would not last very long and, therefore, decided to finance it by borrowing rather than by taxation. She wanted to keep the German people in good humour not only by not taxing them to the extent necessary for financing a costly war but by holding out a bright picture of a triumphant Germany. This was for instance the view held by Helfferich who was the Financial Secretary in 1915. When the war was prolonged, an attempt was made to introduce war profits tax and turnover tax, but Germany could not raise by them more than five per cent. of the war costs. Thus she had to fall back upon the device of raising loans.

In the beginning when the government issued war loans, people lent their savings through feelings of patriotism. The success of the 5 per cent. war loans was so great that by 1916 the German government was able to pay back the advances of the Reichsbank and also have a surplus of 5 million marks. But it was soon realised that this success was made possible by advances from the loan offices. From 1916 the ability of the German people to subscribe to loans was impaired by the rising cost of living and the Government had to fall back upon borrowing from the Reichsbank. Consequently by the end of the war, the unfunded debt wholly raised from the Reichsbank had risen to 40 billion marks. The funded debt—5 per cent. war loans—amounted to about 100 billion marks.

The effects of government borrowing were seen on the currency circulation in the country. At the beginning of the war currency circulation was estimated at 6 billion marks; it consisted of 2 billion worth Reichsbank currency and 4 billion worth gold coin and token currency. Thereafter because of the need of gold for making payment for purchases in foreign

countries, the gold coins were withdrawn from circulation and were replaced by paper currency. The currency circulation increased from year to year as follows :

In billion marks.

1915	10.0
1916	13.0
1917	19.5
1918	28.4

The full effects of the currency inflation were not seen by the people because of certain factors. The exchange value of the mark which would have reflected the depreciation of the mark could not indicate the extent of inflation because it was not functioning properly as Germany was cut off from the rest of the world. Moreover, foreigners who held German currency did not unload it because they still had confidence in her ability to bring back currency to par. Externally, therefore, the mark fell by only 50 per cent. Internally also prices did not indicate the degree of inflation because prices were deprived of their power of reaction by the control of the government on commodities and their maximum prices. In spite of these drags, price and wage levels did not completely fail to indicate that inflation was afoot. By the time of the armistice, the commodity index had risen to 230 as against 100 in 1914 ; the wages index was also 250 as against 100 in 1914. Thus the currency situation was serious if not dangerous. Unless the government was prepared to take drastic measures of economy and gradual deflation, Germany was faced with the prospect of a complete paralysis of the economic structure.

This was the situation when the war ended. It was already serious. But the terms of the Armistice and the Peace Treaty put such a burden on her that the task of bringing back German economy to peace

time basis was made almost impossible. Many people then believed that Germany had lost her industrial leadership for good. The Armistice conditions provided for : immediate evacuation of all territories occupied by Germany ; withdrawal of all the German troops beyond the Rhine ; Allied occupation of the 30 kilometer bridgeheads on the right bank of the Rhine ; creation of a neutral zone of 10 kilometers on the right bank of the Rhine ; delivery of all munitions and the surrender of the major part of the fleet. These were military terms. In addition to them it was provided that : Germany should deliver 5,000 railway engines, 150,000 freight cars, the whole of the railway in the Alsace and Lorrain, 5,000 motor trucks and also return all the gold taken from the banks of the conquered countries ; and should further accept the continuance of blockade until the Peace Treaty was signed ; and in addition pay, because Germany was alleged to be guilty of causing the war, reparations which were to be fixed by the Peace Treaty.

It is not necessary here to go into the political tangles created by the bargaining of politicians at Versailles. We are more concerned with the burden placed on Germany by the terms of the Peace Treaty. The Treaty which was signed on June 28, 1919 contained the following terms : the Allied occupation was to continue until 1935 with gradual withdrawal in 1925, 1930 and 1935 ; Alsace and Lorrain were to be ceded to France as also the Saar coal mines ; the Saar province was to be administered by the League of Nations for 15 years and then its return was to be determined by a plebescite ; certain parts of Germany adjoining to Belgium were to be given to her ; the Dutchy of Luxemberg was to be removed from the German customs union ; upper part of Schleswig was to be given to Denmark ; parts of West Prussia, Posen and upper Silesia were to be given to Poland ; Danzig

was to be made a free city under the administration of the League ; Memel was to be inter-nationalized ; East Prussia was to be separated from the West by a corridor to be given to Poland to give her an outlet to sea ; colonies were to be divided among the Allies as mandated areas ; France was to be given 38 million tons of coal per year for ten years as also many chemicals and livestock for the destruction suffered by her ; Germany was to bear the costs of the Allied army of occupation and the various commissions set up to enforce the terms of the Treaty ; Germany was also to grant the most-favoured-nation treatment to the Allies in her trade though they were not bound to give her the same treatment ; in addition Germany was to pay reparations which were to be decided by a commission by May 1, 1921 ; in the meanwhile Germany was to pay 20 milliard gold marks and issue bonds for further 80 milliard marks. Finally the Reparation Commission announced the total reparations payable by Germany as 132 milliard gold marks.

These were the terms to which Germany willy-nilly agreed. If their total effect is summed up Germany lost about 13 per cent of her population, 13 per cent of the European territories and colonies which were nearly five and half times the size of Imperial Germany of 1913. From the point of the value of production in 1913, her loss in productive capacity was 15.7% of coal, 48.2% of iron ore, 19% of iron and steel industry, 59% of Zinc industry, 24% of lead and 12% of sulphur. In addition she lost 15.5% of arable land and 12% of livestock. While her colonies were taken away no compensation was paid for land, railways, posts, etc., and it was left to the German Government to compensate her bond holders. In all the loss of foreign holdings was estimated at 28 milliard marks. Thus the terms of the Armistice and the Treaty went beyond the 14 points of President Wilson

on the basis of which Germany had asked for armistice. The aims of the Allies were clear. They wanted that Germany should not raise her head again for the remainder of the twentieth century.

Apart from the absurdity of the size of reparation payments, the remaining terms of the Treaty dismembered Germany into pieces and made economic reconstruction and progress difficult. The highly organized structure of the coal and iron and steel industries which she had built in the Ruhr, Alsace and Lorrain was destroyed and the Ruhr coal deposits were left without iron ores. The loss of agricultural land made her problem of food supply acute. The separation of East Prussia from the main land made the development of that part difficult. Moreover, the creation of small hostile states round Germany led to the resentment of the German people. To say the least, the Treaty was most humiliating to a great nation and had direct repercussions on her economic development in the next decade.

The Social Democratic government assumed powers under the shadow of a discouraging future. The most pressing problem of the German economy which faced them was the problem of checking currency inflation. The first step in this direction was to balance the budget which was a herculean task in view of the Treaty burden. Under the Imperial constitution the main powers of taxation were with the states. During the war, for reasons already mentioned, the Imperial government did not introduce any new taxation. The new government reformed the system of taxation and introduced national taxes of a democratic nature. Thus the war profits tax provided for the complete confiscation of unjust profits. While this reform was going on the social Democrats were pressed by the people to implement their election promises of higher wages and salaries, shorter

hours of work and free education. To make itself popular, the government took certain steps in these direction with the result that expenditure increased. But the new taxation was not immediately put into force and the government met the increased expenditure by borrowing. Inflation instead of being checked was given a free rein.

It is generally regarded that the pressure on Germany to make reparation payment has been also responsible for the depreciation of the mark. The huge sums demanded from her could be paid by Germany only by transferring bills of exchange in foreign currencies. She could secure them only from a surplus trade balance. But in the immediate post-war years she had to import food and raw materials on a large scale and, therefore, she could not secure a favourable balance of trade. The expansion of exports was also made difficult by the high tariff walls which were raised by other countries. Germany made payment for some time by transferring gold from the Reichsbank and by securing foreign currencies by the sale of bonds, shares and real estate held by her at the end of the war in foreign countries. When these were not adequate she sold paper marks to foreign buyers. Between 1919 and 1922 Germany paid, according to the Reparation Commission, about $5\frac{1}{2}$ milliard marks in cash and kind and ceded properties amounting to $2\frac{1}{2}$ milliard marks ; but the German estimate places the figure of total payments at 41 milliard marks. The actual figure of payments has been a controversial issue. The German mark, however, depreciated heavily. The pre-war ratio between the dollar and the mark was 1 to 4 ; when exchange operations were resumed in January, 1919, the rate had dropped to 8 ; in December it was 50 ; in 1920 it varied between 40 and 90 ; in 1921, between 60 and 250. The depreciation had already assumed a dangerous

course and Dr. Schacht, the President of the Reichsbank had pointed out that unless Germany was able to export more, she could not make reparation payment without damaging the economic structure.

But still there were some hopes that the Allies would solve the problem of reparations. In July, 1922, the German government asked for a two-year moratorium and pointed out that if it was turned down a financial crash could not be averted. The Allies met in London. England and certain other countries were prepared to accept the German demand, but M. Poincaré representing France flatly refused by saying that Germany was trying to evade payment. He went further than that and decided to enforce the 'productive guarantees' provided in the Treaty by occupying the Ruhr. France and Belgium sent a Mission of Control to the Ruhr in 1923. These events opened the floodgates of inflation. German capital began to be exported out of the country. People fearing further inflation rushed to buy food and other materials. The mark started depreciating faster than the printing presses could print notes. In fact it was reported that people started printing their own currency, the so-called emergency currency. The exchange value of the mark fell and a dollar fetched first millions, then billions, and finally trillions of mark. It has been estimated by Lord d'Aburon that in the final stages of the great inflation the German currency was worth 43,000,000,000,000 to the pound.* The currency became worthless and ceased to be recognised as a measure of value. The worst that can happen to any currency, its repudiation by the nationals, had come to pass.

Was inflation of currency a deliberate action? Some people say that it was. According to them if

* Harris, German's Foreign Indebtedness, p. 2.

the German government wanted to avert the collapse of currency, it could have done it by taking timely action. "The cabinet Ministers and their advisers", Die Bank wrote in September, 1932, "think it impossible to stop the printing presses. Besides, they believe that it would be impolitic because, if the value of German currency should improve, it would proclaim Germany's increased ability to pay reparations and would therefore increase the claims for reparations on the part of the Entente". How far this allegation against the ministers was true, it is very difficult to prove. But certainly the attitude of the Allies was unconciliating and was the cause of the desperate attitude of the German people who were faced with an endless future always crushed under debt. An analysis of the course of depreciation will show that there were four causes responsible for it: the political events of the period consisting of the announcement of the terms of the Peace Treaty, the fixing of the reparation charges, the London ultimatum, the occupation of the Ruhr and the final collapse of the passive resistance of the Germans there; (2) reparation payments; (3) the inability of the government to balance its receipts and expenditure; and (4) the measures adopted by the government and the Reichsbank to finance the passive resistance of the Germans in the Ruhr to its occupation. Referring to the Allied action, Angell says: "In the last analysis, however, these events taken together were themselves the product of the fundamental contradiction between the two great aims of the Allies, security and Reparations. Complete security entailed crushing Germany's military and economic power, but a crushed Germany could not and did not pay Reparations. The German foreign exchanges were jammed between

these two millstones, and the value of the mark was ground to dust."*

The inflation had wiped out the working capital of German enterprises and it was difficult to obtain fresh credit. Germany's credit in the world was at the lowest point. Internally people were faced with starvation and the possibility of Bolshevism spreading among the people appeared to be great. An effort, therefore, was made to stabilise currency and the credit for achieving it goes to Dr. Luther, the Finance Minister and Dr. Schacht, the Currency Commissioner. An altogether new currency, the Rentenmark, was issued on the security of agricultural property, banks, industry and trade, and business in general. In November, 1923 the new currency was issued and was exchanged with the old currency at the rate of one Rentenmark equal to 1,000,000,000,000 old marks. In November, 1924 the new currency was placed on the pre-war basis with its gold value at 1,2790 kilograms. The cover for it was fixed at 40 per cent. gold and high valued securities with at-least 30 per cent. in gold and 60 per cent. in bills of exchange with three signatures and not more than three months to run. When thus the currency was finally stabilised, there was practically no old currency left.

The stabilisation of currency was a miraculous success. It was achieved no doubt because of the ruthless manner in which Dr. Luther cut down the expenditure of the government and introduced new taxation. In addition the people had suffered greatly during the period of inflation and wanted a stable standard of value. The Dawes Plan accepted by the Allies late in 1924 also created hopes about the rehabilitation of German industry, and brighter future. The combined effect of all the three factors worked to

* Angeil, *the Recovery of Germany*, p. 29.

create confidence of the German people in the new currency.

The inflation of currency was over, but it had left indelible marks on the social and economic life of Germany. Firstly, the rentier class was not only completely wiped out but its members were reduced to the position of the middle-class proletariat. They provided a fertile ground for recruitment to the National Socialist Party. Secondly, the German industrial structure was weakened by the rise of mushroom concerns floated to take advantage of the abnormal rise in prices ; at the same time inflation facilitated the growth of huge combines like the Stinnes **Konzern** which began to disintegrate as soon as currency was stabilised. Thirdly, when the currency collapsed the entire working capital was lost. Fourthly, the burden of debt on the German government which had increased during the war was wholly wiped out. Fifthly, the German agriculturists and industrialists were relieved of their burden of indebtedness in respect of fixed capital, mortgages, etc. As regards the agricultural and industrial production and foreign trade, it was shown in the previous chapters how they languished in the period of inflation. In spite of the encouragement given to exports by depreciation, the export trade failed to expand much, while imports continued to grow because of the food and raw material situation with the result that between 1919 and 1923 the unfavourable balance of trade was 8 milliard gold marks.

At the end of 1923 Germany was still in a desperate plight. The stabilisation itself had led to a sharp crisis in trade and industry. Hence Dr. Cuno, the Chancellor, demanded an enquiry by experts into Germany's capacity to pay. This request was granted and in 1923 two commissions were set up—the one presided over by General Dawes and the other by Sir

Reginald McKenna. The first committee was charged with the work of inquiring into the means of balancing the German budget and the steps to be taken to keep the German currency stable. The task of the second committee was to enquire into the amount of capital that had left Germany and the means of bringing it back.

The Dawes Committee submitted its report in April, 1924 and was accepted by the Allies in August, 1924. Though the Committee was entrusted with the question of budget and currency only, it had to make recommendations even on questions relating to reparations, industry and commerce because the solutions suggested for the former question depended on the working of the latter. The following advantages to Germany show the importance of the Dawes recommendations: (1) the reparation payments could be made by graduated instalments beginning with a small volume and reaching its full size after five years; (2) a system of internal taxation was organized in such a way that the payment of reparations would be facilitated with ease; (3) the measures taken to balance the budget and to guarantee the continued stability of currency left the government free to proceed with the reorganization of industry and the general economic life of the country; and (4) finally they helped to restore the confidence of German, and more particularly of foreign, capital.

The Dawes Plan fixed the standard annual reparation payment at 1,000 million marks for 1924-25 and thereafter it was to rise gradually to 2,500 million marks in 1928-29. In the first year a virtual moratorium was granted. The German government was helped to make payment for that year from a loan of 800 million marks arranged with the help of the Allies. The revenue necessary for the reparation payment thereafter was to be realised from a system of

taxation partly under the supervision and partly under the control of foreign powers. The payment was to be made up from the budget provision, a transport tax, interest and amortization on industrial debentures and interest and amortization on railway bonds. The budget provision was to be made up from the customs receipts of beer, tobacco and sugar taxes and the income from alcohol monopoly. The transport tax was to be levied on the gross revenues of the railways. The industries which were freed of their burden of indebtedness were to be required to contribute a total of 5000 million gold marks. The annual payment by them was to consist of 5 per cent. interest and 1 per cent. amortization charges on the first mortgage bonds issued equal to the total amount. Similarly the railways were to be required to pay a total of 11,000 gold marks. The annual payment was to consist of 5 per cent. by them as interest and 1 per cent. amortization charge on mortgage bonds of an equivalent amount. The payment to be made by industries amounted to 12 per cent. of the annual reparation payment. The contribution of the railways including the transport tax amounted to 38 per cent. of the standard reparations. The Dawes Plan also provided for a reorganization of the Reichsbank. It also made an elaborate arrangement for the transfer of funds so that German exchanges may not be adversely affected.

The Dawes Plan no doubt paved the way for German recovery for the next five years. Industries were able to borrow from foreign countries and carry out a thorough rationalization of their plants. By 1929 the German trade also showed substantial recovery. But the Dawes Plan had some serious drawbacks. The Committee had no authority to revise the scale of reparations and, therefore, the main question of the aggregate amount still remained unsolved. Further

the management of the plan involved foreign control of German domestic affairs, particularly in matters of finance, banking and railroads, which it was difficult for an independent country to tolerate. Finally, the annual payment could be made by Germany only by securing enough bills of exchange in foreign currency. But how could Germany get them when her balance of trade was adverse ? The German government, therefore, made payment by borrowing outside.

One of the serious developments in the years following the introduction of the Dawes Plan was the flood of foreign loans to Germany. As remarked before, not only industries but municipalities and the government borrowed huge amounts from foreign countries, chiefly from the United States. By 1927, Mr. Parker Gilbert, the Agent General for Reparations and Dr. Schacht, the President of the Reichsbank had warned the people against reckless borrowing. In November 1924, the German government made the foreign borrowing of states and municipalities subject to the approval of the Reich Finance Minister. As this law was resented by them as unconstitutional, an Advisory Foreign Loans Council was set up to recommend foreign borrowing. Though this body succeeded in checking foreign issues, the total amount of loans was substantial ; because though municipal borrowings were discouraged, the industrial borrowings were encouraged. A reference to the total borrowing by Germany has been made in a previous chapter. The following figures, therefore, only show the year to year borrowing :

(In million RM)

	Long term	Short term	Unclassifiable	Total
1924	1,000	1,500	400	2,900
1925	1,100	300	1,700	3,100
1926	1,400	100	900	2,400
1927	1,700	1,800	400	3,900
1928	1,700	1,400	1,200	4,300
1929	600	1,100	1,000	2,700

Under these conditions the German government asked the Allies to review the whole situation again. The Paris Conference held by the Allies in 1929 made certain recommendations for the future which have come to be known as the Young Plan. It fixed for the first time the duration of reparation payments and the total amount to be paid. The total sum to be paid was fixed at 121 milliard marks and was to be spread over 59 years till 1988. The annual payments were also considerably reduced. The annual payment beginning with 1.6 milliard marks was to increase to 2.3 milliard marks in 1965; thereafter it was to be constant at about 1.7 milliard marks. The foreign control established on the economic life of Germany was removed and financial autonomy was restored to her. The Plan also proposed for the partial commercialisation of annual payments by the issue of bonds. By their public sale the Allies could get immediately a part of the total payments. The industrial and railway mortagages were abolished and suitable changes were made in taxation to raise adequate funds. Finally an understanding was arrived at between the various parties that if the United States reduced her demands on the recipients of reparations, the debtor countries, then Germany was to be given a proportionate relief. The Plan was put into force in May, 1930 but it hardly worked for one year. After the crisis of 1929 President Hoover realised the disturbing

effects of the payments of international debts arising from the Great War. He, therefore, proposed the suspension of all such payments in 1931 for one year. The subsequent Lausanne Conference virtually put an end to all reparation payments.

Germany could not escape from the effects of the crisis of 1929-31 and a serious setback was given to her recovery after 1924. The following chapter will describe the efforts of Germany in the subsequent years to restore stable economic conditions.

Chapter XX

THE NATIONAL SOCIALIST ECONOMIC STRUCTURE AND POLICY

Before the Rise of National Socialism

To understand fully the implications of the economic and social changes introduced in Germany by the National Socialists, it is necessary to know the old economic system. The study of this system falls into two periods, the one before the revolution of 1918 and the other after it. The economic system of Germany before the National Socialists came to power was based on capitalism. But to distinguish it from the capitalism that exists to-day in Germany, it may be conveniently called as 'laissez-faire capitalism'.* Under this laissez-faire capitalism, private property was recognised and its rights were protected not only against infringement by individuals but even by the state. All economic undertakings were guided by one motive, the desire for private profit. It was thought that the interests of the community would be best served by each individual working with self-interest.

* Hoover, *Germany Enters The Third Reich*, p. 2.

Thus all industrial concerns were managed with a view to make the maximum profit for their shareholders. It was none of the concern of the directors or managers to give any thought to the interests of the community.

When the revolution of 1918 was brought about by radicals it was expected that capitalism would be replaced by socialisation of property on the Russian lines. But the radicals failed to capture power which passed into the hands of the sober socialists and the bourgeoisie. The Social Democrats who formed the government kept the old structure as it was and contented themselves merely with a reformist programme. They claimed that German capitalism was decaying and that the socialisation of the country was progressing gradually. It is true that German capitalism was weakened in this period, but it could not be regarded as in any way different from capitalism in other countries. If there was any difference, it was one of degree rather than kind. One of the factors which weakened the force of capitalism was the unmatched strength of trade unionism. Collective bargaining was accepted by employers and the state gave collective agreements the status of legal contracts. A system of arbitration was introduced to settle labour disputes. Works councils were introduced in all industries and were centralised in a Federal Economic Council. In other countries this was regarded as the beginning of the democratisation of industry. In addition there existed a highly developed system of social insurance which was extended to include unemployment insurance. An attempt to introduce a universal eight-hours day was also made. Thus as far as labour is concerned, its power had definitely grown.

Another feature of the post-war development was the further concentration of industry by forming car-

tel s and combines. It was claimed that cartelisation would be able to avoid or check economic crises. The cartels achieved nothing of this kind. The economic depression of 1929-32 was as severe in Germany as in other countries. The German capitalism was, therefore, as much subject to economic crises as capitalism elsewhere. If anything was achieved by cartels, it was higher efficiency and less waste. In this period, however, the number of enterprises operated, or owned and operated, by the state increased. The production of state owned enterprises was as follows : 10% of the total German coal ; 33% of lead ; 25% of silver ; 10% of potassium : and 50% of electricity (with another 25% by joint state and private enterprise). In addition there were many plants in which the state had an interest. But these state enterprises were not developed with the ultimate object of nationalising all the means of production. In fact many of them were there before the revolution of 1918. But even if it be conceded that state ownership had made some progress, it did not change the character of German capitalism because the total production of these enterprises was less than 10% of the total German production and they were managed in much the same way as other enterprises. Neither wages nor prices were fixed in a different manner.

This was the nature of German capitalism which achieved remarkable recovery from 1924 to 1928. In 1929 it appeared that the turning point in recovery had been reached and that a slump had started. In the first half of the year the two factors which had a depressing effect on industries were the growing unprofitableness of enterprises and the rise in the rates of interest in the capital market. The conclusions of the Paris Conference regarding reparations were disappointing to the Germans who were told that the payments would have to be made over a period of 59

years (till 1928). While the negotiations were going on, on political grounds the French had started withdrawing some of their short term funds which forced the rates of interest upwards. Money was also flowing from Europe to New York to feed the stock exchange boom there. This also had a similar effect on interest rates. The wages were going up and the burden of social services on industries had increased with the recent introduction of a national unemployment insurance scheme. High interest rates affected business activity and gradually internal demand showed signs of slowing down. But for some time industrial activity was maintained because of the foreign demand. The prices, however, showed a downward tendency, particularly the 'free' prices not subject to cartel control. Between 1928 and 1929 they declined by 9 points. At such a time when the German business was showing signs of nervousness, the crash on the New York stock exchange occurred. It had its repercussions on the German economy which was soon in the grip of a depression.

Soon after the American crisis, the flow of capital to Germany stopped. On the contrary, with the increase in the National Socialist and Communist votes in the Reichstag elections of September, 1930 and the proposal for a customs union with Austria in 1931, the withdrawal of foreign funds started on an alarming scale. When one of the biggest banks of Austria, the Credit Anstalt, failed in May, 1931, the nervousness of foreigners developed into a panic. The Reichsbank lost gold heavily in spite of the increase in the discount rate. The Hoover moratorium for one year instead of helping, by declaring the weakness of Germany, accentuated the withdrawal of funds. The banks were on the verge of collapse and, therefore, on July 14, 1931, the government closed all banks indefinitely. On the next day all foreign exchange

transactions were centralised in the hands of the Reichsbank and an official control was placed on them. On August 5, 1931, the banks were reopened for restricted business. If the withdrawal of funds had continued, the whole economic structure would have been endangered and, therefore, on September 1, 1931, a Standstill Agreement was arrived at between Germany and her foreign creditor banks. But this agreement did not apply to all debts and, therefore, the withdrawal of funds continued though on a reduced scale. The German banks were compelled to call back their loans which in many cases could not be returned by the borrowing concerns. Fresh credit was difficult to be obtained and business activity was seriously curtailed. But the final blow to business depending on foreign markets was delivered when the competitive power of Germany was seriously affected by the suspension of the gold standard first in England and then in other countries. The exchange restrictions in Germany also seriously affected her import trade.

In 1931 the Bruning government was advised to devalue the German currency to maintain export markets. But it was not prepared to take such a drastic measure. On the contrary it decided upon deflation of currency and the balancing of the budget by economies in expenditure and increase in taxation. Prices, wages and interest rates were also reduced compulsorily. Consequently the money income of the community declined and thereby affected production. The unemployment in the country increased. There was a further fall in prices and, therefore, in production.

In May, 1932, the Bruning government was replaced by the von Papen government. Immediately they took steps to increase employment. In September, 1932 the government issued what are known as

tax remission certificates to business men for the taxes due from them for the financial year 1932-33. The government undertook to redeem them during the period 1934-38. They carried a 4% rate of interest. They could be sold on the stock exchange and the proceeds could be used in business. It was expected that this would increase investment and have a salutary effect on capital industries. In addition large sums of money were spent on public works.

The von Schleicher government succeeded the von Papen government and proceeded with the programme of public works. A Commissioner for the Creation of Employment was appointed in December, 1932, to supervise a programme of public works. It was not possible for the government to raise funds through the ordinary channels and, therefore, a novel way was used to raise money. The contractors to whom the works were entrusted were asked to draw what are known as the employment creation bills for the acceptance of which arrangements were made with special financial institutions, the Deutsche Gesellschaft für Öffentliche Arbeiten (Oeffa), the Deutsche Rentenbank-Kreditanstalt and the Deutsche Bau und Bodenbank. The accepted bills were discountable at commercial banks or the Reichsbank. These bills were usually drawn for three months but could be replaced by fresh bills if payment was not made on the due date. Thus they were current for indefinite periods until the government found it possible to redeem them. In addition arrangements were made with employers to take up additional labour. In September, 1932, interest on agricultural mortgages was reduced by 2 per cent. with a minimum limit of 4 per cent. The effect of expenditure on public works, the reduction of interest rates, and the compulsory reduction of regulated prices began to be seen from the middle of August, 1932 when the signs of slight recon-

very began to appear. The following statistics will show the effects of the depression before the National Socialists assumed power :*

Economic Indices

National Income Mrd. Rm	Wholesale Price 1913=100	Industrial Production 1928=100	Imports Mrd. Rm	Exports Mrd. Rm	Un- employ- ment ('000)
1928 75.4	140.0	100.0	14.0	12.3	1,353
1929 76.0	137.2	100.1	13.5	13.5	1,892
1930 70.2	124.6	87.0	10.4	12.0	3,076
1931 57.5	110.9	70.1	6.7	9.6	4,520
1932 45.2	96.5	58.0	4.7	5.7	5,575

The effects of the crisis of 1931 on the relations of the state to industry were far-reaching. Because of the failure of many banks and the weak condition of others, the government had to take over the stock of some and give loans to others. Thus government came into direct or indirect control of many banks. The government owned 90% of the stock of the Dresdner and Danat Bank ; 70% of the Commerz und Privat Bank ; and 35% of the Deutsche Bank. The total help thus given amounted to nearly 1,115 million marks. But as these banks were intimately connected with industries and had given loans to them which had got frozen, the government got control over private industries also. But this control was not fully utilised until the National Socialists captured power. The government also bought the majority stock of the Gelsenkirchen and was in a position to control the steel trust. It extended help to shipping companies which amounted to about 89 million marks. Thus the crisis brought about a new relationship between private enterprises and the government. But these

* Guillebaud, The Economic Recovery of Germany, 1933-1938, p. 31.

changes could not be regarded to have brought about any fundamental change in the character of German capitalism. They were more in the nature of emergency measures. The state had as it were taken up the risks because of the losses suffered by enterprises rather than because it had changed its attitude to private capital. Even the capitalists regarded the new phenomenon as a temporary phase and that the position of the German capitalist enterprises was unaffected. Thus even the crisis left the capitalist structure more or less unimpaired and the only change that had occurred was that governmental interference had increased. It was, however, a feature shared by other countries though to a lesser degree.

Principles of National Socialism

The principles of National Socialism were stated in the National Socialist Party's programme adopted in February, 1920.* They were reiterated in 1933

* The twenty-five points of the official programme of the National Socialist Party : (1) The union of all the Germans to form a Great Germany on the basis of the right of self-determination enjoyed by nations. (2) Equality of rights for the German people in its dealings with other nations, and the abolition of the Treaties of Versailles and St. Germain. (3) Restoration of German colonies to her for the nourishment of her people and for the settlement of her superfluous population. (4) None but the members of the nation shall be allowed to be citizens of the State ; only people of the German blood may be members of the nation ; no Jew, therefore, may be a member of the nation. (5) Any person who is not a citizen of the State may live in Germany only as a guest and must be regarded as being subject to foreign laws. (6) The right of voting in the State's government and legislature shall be enjoyed by the citizens of the State only. All official appointments of whatever kind, whether in the Reich or in the local government, shall be granted to citizens of the State only. The

when the party came into power. Some light has been also thrown on them in the pages of *Mein Kampf*

old Parliamentary custom of filling posts merely with a view to party considerations and without reference to character or capability of persons shall be abolished. (7) The first duty of the State shall be to promote the industry and livelihood of its citizens. If it is not possible to nourish the entire population of the State, foreigners, i.e., non-citizens of the State, must be excluded from the State. (8) All non-German immigration must be strictly prevented. All non-Germans who came and resided in Germany after August, 12, 1913, shall be required to depart immediately from the Reich. (9) All citizens of the State shall enjoy equal rights and duties. (10) It shall be the first duty of each citizen of the State to work wholeheartedly. It must be seen to it that the activities of the individual do not clash with the interests of the whole, but proceed within the frame-work of the community and for the general good. (11) Incomes unearned by work must be abolished. (12) In view of the enormous sacrifice of life and property required of a nation by every war, personal enrichment due to war must be regarded as a crime against the nation. All war profits should be ruthlessly confiscated. (13) All businesses which have been up to the present formed into companies must be nationalised. (14) The profits from the wholesale trade shall be shared out. (15) Provision for old age shall be extended. (16) The immediate communalisation of the big departmental stores shall be brought about. (7) A land reform suited to the requirements of the nation and a law for the confiscation of land without compensation for the common purposes shall be introduced. Interest on investments in land shall be abolished and speculation in land shall be prevented. (18) Those persons whose activities are injurious to the nation ought to be ruthlessly prosecuted. (19) The Roman Law which serves the materialistic world order ought to be replaced by German common law. (20) The national system of education ought to be thoroughly reconstructed so as to make the benefits of higher education avail-

of Herr Hitler and the speeches of leaders. Though some definite lines of political, social and economic policies can be seen from them, they have been or are

able to all Children of the poor must be given education at the expense of the state. The objectives of education must be in keeping with the requirements of practical life. The idea of state worship should be imbibed in children from the very early stage when they enter school. (21) The state must look to the physical well-being of the nation. With this end in view, the state must protect mothers and children, prohibit child labour, lay down the standards of physical efficiency by law and strive to attain them by obligatory gymnastics and sports and by the support to clubs engaged in the work of developing the physic of youths. (22) A paid army ought to be abolished and a national militia built up. (23) A German national press shall be created by compelling all editors and their assistants employing German language in their newspapers to become members of the nation; by requiring that before non-German newspapers appear a special permission must be taken, and by prohibiting non-Germans from financing or influencing German newspapers. They must not publish any papers which are likely to harm the national welfare. All tendencies in art and literature which are likely to lead to the disintegration of the common life of the nation and the institutions connected with them ought to be strictly dealt with by law. (24) There shall be no restrictions on liberty of religion so long as it does not constitute a danger to the state or does not militate against the moral feelings of the German people. The common interest must have precedence over self-interest. (25) To realise the foregoing objects a strong central power of the state must be created. The strongly centralised Parliament must have complete and final authority over the entire Reich and its organisation. Chambers must be established for different classes and occupations for the purpose of carrying out the laws of the Reich in the federated states. (See Paul Einzig, *Germany's Default, The Economics of Hitlerism*, pp. 125-28.)

likely to be modified in the light of experience. It is not possible to give more than an outline of these principles. These principles are : (1) In the political field National Socialism is opposed to the principle of democracy. According to it, the parliamentary system with its number of sharply divided parties and the principle of majority decision makes the government weak and, therefore, the National Socialists prefer a system based on one party and one leader. Its voice shall be the voice of the nation. (2) In the social field they insist on the purity of race. They believe that the Germanic or the Nordic race is superior to other races and, therefore, deserves to dominate the world. All other races which are likely to affect the purity of the German race must be eliminated from the social life of the country. The persecution of the Jews and their removal from all the key positions in the government and industries has been a part of this policy. All efforts are to be made to restore the purity of German race and culture. Agriculturists less affected by the mixture of bloods would be given special attention. The physical well-being of the people also must be given special attention. For the same reason, women are to be restored to their rightful place, the home, and the old German culture which has been affected by the industrial civilisation is to be revived. (3) As the existing legal system based on the Roman Law is not likely to facilitate the execution of the policy of the National Socialist government, it should be replaced by a Germanic law. (4) All the German people form an indivisible community, and, therefore, there is no place for class conflicts. The interests of workers and employers are identical ; they should, therefore, work to increase the power and prosperity of the nation to which they belong. (5) War is not abhorrent to the National Socialists. On the contrary, according to

* * *

them, the supreme test of manhood is the ability and desire to fight. Pacifism which kills the fire of manhood has no place in their philosophy. (6) Every person has a right to work and, therefore, it is the duty of the state to provide work for all. All efforts, therefore, must be made to banish unemployment. (7) They neither believe in the international organization of labour nor in the organization of workers against employers. Trade unions, therefore, ought to be dissolved and both employers and workers ought to be brought together in a common national organization to remove their mutual distrust. (8) They do not repudiate religion altogether, but they want a religion which would imbibe the spirit of nationalism in the people. A new movement of German Christians devoted to the highest ideals of the nation is to be set up.

In the economic field, the general principle of the National Socialists has been that: "all economic activity will be governed by the law that the nation does not live for the benefit of the economic system nor the economic system exist for the benefit of capital, but that capital serves the economic system and the economic system the nation".* Thus national interests must have precedence over all other interests individual and institutional. In the light of this general principle they chalked out their economic programme the salient points of which were: (1) They believed that the interests of the nation cannot be served best by laissez-faire capitalism; but at the same time the complete nationalisation of property, which smacked too much of communism was not acceptable to them. They, therefore, hit upon the middle course. The outer form of capitalism was not to be changed but it was to be subjected to a strict

* Rawlins, *Economic Conditions in Germany*, p. 1.

regulation by the state (2) All economic activities were organized on the corporative plan ; every individual or enterprise engaged in economic functions had to be a member of an association representing those particular functions. Enterprises were to be conducted under the guidance of leaders. (3) The National Socialists laid great stress on self-sufficiency as a desirable end not only in war, but also in peace time. Encouragement, therefore, was to be given to the production of more food and raw materials of which Germany was short. In the Great War this shortage was keenly felt and the weakness of Germany was exposed. In the post-war period also many of her industries were vitally dependent on foreign supplies of raw materials. Nevertheless Germany may not be able to build up a complete autarchy and the leaders of the party were conscious of it. (4) For social and economic reasons, they believed that agriculture was the basis of national economy and, therefore, all reforms must begin with agriculture. (5) According to them interest was usury. They also recognised that interest played a very important part in the full utilisation of the national resources, human and material, and therefore, it was to be controlled by the state. Their ideal was to break 'interest slavery'. (6) In the interests of the community, they said, prices and wages ought to be controlled. Unless this was done unemployment could not be banished and the national standard of living could not be improved.

These are in brief the political, social and economic principles of the National Socialists. We are here concerned more with the economic aspect of National Socialism and, therefore, in the following pages an attempt will be made to show how they have applied these principles in the reorganization of the German economy and its recovery from the immediate depression.

National Socialism in Action

When the National Socialists came to power on January 30, 1933, they had two tasks before them, one to give effect to their programme and the other to deal with the immediate problem of depression. They did not separate the two policies because the success of one depended on the other. The programme carried out by them was embodied in two four-year plans, the one from 1933 to 1936 and the other beginning from 1937. In the following pages first the structural changes will be discussed and then the policies adopted in the two plans.

Agriculture was reorganized by a law of September 13, 1933 which created an Agricultural Estate. All persons and organizations engaged in the production and distribution of agricultural commodities were required to be its members. The previous organizations connected with agriculture like the Chambers of Agriculture, the National Farmers' Association, etc., were either dissolved or incorporated in the Agricultural Estate. The final authority in all agricultural matters was given to the Reich Minister for Food and Agriculture (who was called the Farm Leader.) There were a number of advisory bodies which were set up to advise him. The organization is competent to deal with all matters connected with agriculture like production, sale and prices of agricultural goods. The chief aim of the organization is to make Germany, as far as possible, independent of other countries in respect of foodstuffs and raw materials.

The German industry and commerce were organized into an Estate of Industry and Trade by a decree issued on November 11, 1934 under the law for the Preparation of the Organic Structure of German Economy of February 27, 1934. The object of starting this organization was to link together the units

composing German industry and trade, both functionally and territorially, into a single master entity, the Minister of Economic Affairs. The members of this organization consisted functionally, of the industrial and commercial associations and federations and territorially, of the chambers of commerce and chambers of handicrafts. Further all employers and undertakings independently engaged in a branch of trade or industry were compulsorily required to be members of their respective functional and territorial organizations. The ultimate object of this organization was to introduce and develop 'responsible economic self-government in trade and industry under the general direction of the state'. "German industry and trade", says Rawlins, "have not been nationalised; indeed, the maintenance and fostering of private property and personal initiative is emphatically declared to be part of the National Socialist scheme of things. But the vigour and extent of governmental intervention in matters affecting the initiative and freedom of choice of the industrial and commercial entrepreneur are so remarkable that the claim to be on the road to at least centralised national effort can be regarded as established."*

German handicrafts have been organized into the Estate of German Handicrafts by a decree issued in June, 1934. All firms and individuals entered in the Register of Craftsmen as well as all journeymen and apprentices employed by them were to be its members. Regional and functional associations were also formed under the direction of the Grand Master of Handicrafts. As this organization is linked up to the Estate of Industry and Trade the final authority is the Minister of Economic Affairs.

The transport system formerly formed a part of

* *Ibid.*, p. 82.

the Estate of Industry and Trade but in 1934 for administrative reasons it was organized on corporative lines into a Transport Organization under the Minister of Transport. He is given complete authority over all government transport undertakings, all municipal undertakings and all private enterprises. The supreme body under the Minister is the Reich Transport Council consisting of the representatives of transport organizations and their users. Below the Council are a number of regional and district councils. The function of the Reich Transport Council is to advise the Minister on all matters concerning transport.

Like the Social Democrats, the National Socialists were faced with the problem of the position of labour in the economic structure. They were opposed to the international organization of workers and yet were prepared to give them a place in the affairs of the nation. The trade unions, therefore, were dissolved, as said in the previous chapter, and, a German Labour Front was organized on May 10, 1933. Since 1935 it included also employers. The Labour Front does not form a part of the machinery of the state, but is an independent organization of the National Socialist Party. "The aim of the German Labour Front is", the Decree of October 24, 1934 states, "the formation of a real community of achievement...among the whole German people. It must seek to ensure that every individual can take his place in the economic life of the nation in that mental and physical condition which will make for his greatest achievement, and thereby secure the greatest gain to the community as a whole... The Labour Front must seek to preserve industrial peace by inculcating in the employers...an understanding of the legitimate claims of their employees..., and in the employees an understanding of the situation and the possibilities of the business in which they are working.. Its duty is to find that compromise between

the legitimate interests of all concerned, which corresponds to the fundamental principles of National Socialism, and which will limit the number of cases which are referred for final decision to the State authorities established under the law of January 20, 1934 . . . It has the duty of administering Kraft durch Freude (Strength through Joy) and has to supervise vocational training".* In 1935 the membership of the Labour Front was 23 millions and it became a formidable organization without, of course, any direct power over wages and conditions of work. All strikes and lock-outs were prohibited and wage disputes were generally settled by Labour Trustees.

With this brief description of the corporative organization of the German economy with the supreme authority in all economic matters in the hands of the state, the understanding of the measures taken and the success achieved in them by the government would be easy. In 1933 when the National Socialists assumed power the situation in the country that faced them was critical. The production in agriculture and industry had declined and there was a continuous fall in prices. The number of registered unemployed was about 6 millions. The financial structure of the country was completely disorganised. The government and other public bodies were faced with large deficits. On May 1, 1933, therefore, Herr Hitler announced the first Four-Year Plan to abolish unemployment.

The policy of creating employment was contained in the law for the Reduction of Unemployment of June, 1933. The measures taken by the administration under it were: (1) the introduction of public works programme financed by the system of employment creation bills used by the previous government; (2) for extending investment, exempting from income-

* Guillebaud, *The Economic Recovery of Germany, 1933-1938*, pp. 194-95.

tax, corporation tax and the tax on trading profits the sums spent by agriculture and industry from current profits on replacements and renewals ; (3) for creating employment for females, the allowing of income-tax rebates to those persons who employed them as domestic servants ; (4) reduction of taxes to encourage holding of stocks which might react favourably on industrial production ; (5) subjection of money and capital markets to a committee under the chairmanship of the President of the Reichsbank ; the object was to bring about larger investment by controlling rates of interest ; (6) introduction of compulsory labour service or 'substitute' labour service under which persons so employed were provided with food and shelter and some cash allowance ; (7) the giving of marriage bonuses to the newly married couples provided the wife gave up her former employment ; this plan had two objects, one to create employment for men and second to provide more purchasing power ; (8) lastly, application of government pressure to employers with whom it placed contracts to employ more labourers. In addition to these measures, government controlled wages through Labour Trustees and prices through a Price Commissioner. Where technical improvements were likely to affect employment of labour adversely, government put restrictions on their introduction. To make the price policies successful, a number of cartels were dissolved while in some industries they were compulsorily formed.

The above policy succeeded in increasing employment by 1935. When recovery was well within sight, Germany withdrew from the Disarmament Conference and immediately introduced conscription. An armament programme was drawn up and the necessary finance was raised by the same process as was used for financing public works. This time, however,

the bills were called 'special bills'. They were usually drawn for six months and could be continued indefinitely. At the same time to encourage investment by industries, by a law of 1934 the payment of cash dividend exceeding 6 per cent. was prohibited. It was expected that this would discourage stock speculation and also encourage the industrialists to invest a part of their current profits in plant improvements.

In the crisis of 1931, the weakness of German banks was thoroughly exposed. The intimate contact between banks and industries had been one of the causes for illiquidity and collapse of German banking. By a law of 1934, therefore, the investments and participations of commercial banks were limited and the distribution of assets was regulated. The Reichsbank was given more supervisory powers and the German commercial banks were brought more in line with the English commercial banks.

In agriculture the most outstanding development was the setting up of a marketing organization as in England for each principal commodity. These marketing organizations were given complete power to regulate sale, prices and profits. In order that the interest of home growers should not be jeopardised, boards were established to supervise imports and exports of agricultural and dairy products. As a matter of fact they were trading bodies entrusted with the work of selling home and imported products. Moreover, by the Hereditary Farm Law of 1933, the farms of peasants not exceeding 300 acres were entailed and they could not be alienated or mortgaged in future. This was intended to restrict the growth of big estates to which the National Socialists were opposed. It would also check unnecessary indebtedness on the part of farmers. The farmers, however, were free to borrow on their personal credit. In

addition the government attempted the consolidation of farms which were uneconomic and not sufficient to maintain a family. Incompetent farmers who were incapable of improving their farms were dispossessed of their land which was passed on to the next heir. Large amounts of money were also spent on the reclamation of land. Prices of agricultural commodities were raised substantially and then maintained stable under the direction of the price control organization. On the whole there was substantial improvement in agriculture and though Germany was unable to become completely free from her dependence on foreign countries for foodstuffs, she was able to supply nearly 80 per cent. of the needs.

The interference of the government in foreign trade at different stages was so wide that not more than an outline can be given here. The success of the plan for the reduction of unemployment depended on Germany's ability to secure and pay for raw materials from outside for her industries. In addition, she had the burden of making payments to foreign countries on account of reparations and loans borrowed under the Dawes and the Young Plans. It has been already mentioned that under the stress of foreign withdrawal of funds, the German government placed foreign exchange under the control of the Reichsbank in 1931. But in the subsequent years, the balance of trade showed no improvement and on the other hand there was a steep decline in the value of exports. In 1933, therefore, restrictions were placed on the transfer of interest on foreign loans and a plan was devised to encourage exports and, at the same time, to secure raw materials and foodstuffs for herself. Germany offered to foreign countries that the proceeds of her exports to them would be first used to pay for imports and then for interest payments. Under pressure from the creditors, foreign countries rushed to sign agree-

ments with Germany. Most of them were raw material producing countries which were in need of markets. Germany signed a number of such clearing agreements. But the difficulties of foreign trade did not end with the introduction of this plan. In 1934, therefore, a new plan was announced by Dr. Schacht who was then at the head of the Ministry of Economics. It ordered that before import orders were placed a merchant must obtain a certificate of foreign exchange. Twenty-seven boards were appointed which would determine the commodities to be imported and the countries from which they were to be imported. Thus the objects of this plan were that Germany should not import more than what she exported and that by this plan it would be possible to encourage exports to many countries by offering to buy from them in return raw materials and foodstuffs. In 1935 another plan was chalked out to encourage exports known as the "self-help to industry" plan. A tax was imposed on the German industries to subsidise the exports of those articles in which she had to meet with competition outside. No subsidy was paid on those goods in which Germany could compete or in which she had a virtual monopoly. It is no doubt true that by these methods Germany was enabled to import the raw materials she needed and to carry out her programme of internal expansion. Yet, recovery in Germany's foreign trade was very slow.

By 1936 there were no doubts about Germany's recovery from the depression. National income had increased and unemployment had disappeared. But there was still some discontent in the country among the agriculturists regarding price policies and among the workers regarding wages. In some quarters business men had expressed their resentment with the interference of the government in industry.

Nevertheless, it must be admitted that Germany achieved again a remarkable success in her internal expansion a second time in less than a decade. Of course after 1935 it was partly due to armament programme. In September, 1936, the second Four-year Plan was announced by Herr Hitler. General Goering was placed at the head of the organization. This time the object of the plan was to make Germany independent of foreign countries in regard to her raw material and foodstuff requirements.

Under the plan one milliard marks were allocated for the improvement, drainage and reclamation of land. A campaign for the improvement of the standard of cultivation was undertaken and cheap manures were supplied to farmers. The government also abolished all entails on land except that which was held under the Hereditary Farms Law with the object of bringing more land under small holdings. Prices were also so manipulated that the production of certain crops would be encouraged. Industries producing consumption goods were encouraged to use raw materials produced at home. It was expected that this would reduce pressure on foreign exchange and release it for the import of foodstuffs and the creation of their reserves in the country. The progress of industries and agriculture under the plan was so swift that Germany was actually faced with a shortage of labour in 1937-38. No doubt this was partly due to the youths being drawn into the army. The government, therefore, introduced conscription of labour for works of national importance, lengthened the working day and encouraged the introduction of labour saving devices. In this period also the bulk of foreign trade which still had not completely recovered was carried on the reciprocal basis. The following indices will show the measure of progress made by Germany between 1933 and 1938.

Economic Indices *

	National income (Mrd. Rm)	Wholesale Prices (1913=100)	Industrial Production (1928=100)	Imports (Mrd. Rm)	Exports (Mrd. Rm)	Unemployment (000's)
1933	46.6	93.3	65.7	4.2	4.9	4,804
1934	52.7	98.4	82.9	4.5	4.2	2,718
1935	58.6	101.8	95.3	4.2	4.3	2,151
1936	65.0	104.1	107.8	4.2	4.8	1,592
1937	71.0	105.9	118.8	5.5	5.9	912
March 1938	...	105.8	124.6	...	...	508

The National Socialist government succeeded in creating conditions of full employment in Germany by 1937. In the 'free' countries, however, doubts were expressed about her ability to maintain the present rate of progress and even the present structure based on the authority of the state. According to them among the problems which Germany is likely to be faced with in future, two are prominent ones—the shortage of raw materials and labour and the armament programme. That in spite of her efforts Germany was short of raw materials and labour in 1937-38 is widely known. Secondly, it is suggested that the swift recovery was made possible by the government investment in armaments. What would happen if this driving force were to disappear? Would Germany be faced with another greater slump? Germany is conscious of these drawbacks and it is possible to discern a sinister connection between the armament programme and the demand of Germany for her colonies on the one hand and the shortage of raw materials and foodstuffs on the other. She could not have solved the problems without an understanding with the Allies in the former war. It is also

* Guillebaud, *The Economic Recovery of Germany, 1933-1938*, p. 277.

suggested that the continuance of the present structure would depend on the attitude of labour. The material strain on the workers has been great. It is difficult to say how long they will aquiesce in this state of things. Here also the German government is conscious of it and has developed such a technique of propaganda that the worker's mind is not left free to think for itself. It is true that so long as the workers support the present regime there is very little danger of the present economic structure being upset. But one thing is certain that Germany had reached the parting of ways leading either to peace or war. She has chosen the latter course.

PART IV

JAPAN

Chapter XXI

THE MEIJI RESTORATION

The economic development of Modern Japan begins from 1868. For centuries before this year the social, economic and political structure of the country was based on feudalism. Thus though feudalism had vanished from the Western countries long before, it still held sway over the life of the people in Japan and was at last abolished by the events of 1868. Under feudalism there were two claimants to the sovereignty of the state, the Emperor and the Shogun. The latter who held the rank of the Imperial Commander-in-Chief ruled the country in the name of the Emperor from Yedo (now Tokyo) while the court of the latter was held at Kyoto. Below the Shogun there were about 300 **daimyos** or feudal lords who were surrounded by a class of warriors known as the Samurai. The Shogun was the most powerful of the lords and at the beginning of the seventeenth century reserved for himself three-fourths of the area of the country yielding annually about 4,000,000 koku (a measure of rice in which revenue was collected) of rice. By the middle of the 19th century, his income had nearly doubled. Compared with this the civil list of the Emperor was very poor. The other lords were also required to make at least two trips to Yedo every year and, therefore, this city bore all the signs of prosperity with a larger population and a number of industries. The position of the Emperor, therefore, was anomalous. Though all orders were issued in his name and though

he was the fountain of all honour and titles, in the day-to-day administration he had very little power. While, therefore, the Emperor was the 'de jure' sovereign, the Shogun was the 'de facto' sovereign.

For nearly 265 years before 1868 the Shoguns came from the Tokugawa dynasty whose founder was Ieyasu, a political genius gifted with foresight. When he assumed power, he noticed that for some time in the past traders from the West-Portuguese, Spanish, Dutch and English—were visiting the shores of Japan in search of trade. These traders declared that their intentions were purely commercial but the Shogun suspected political designs also on their part. Japan was being drained of her gold for some time by these merchants because of the low ratio between gold and silver which was 1 to 3 (or 4). The Tokugawa government, therefore, decided to close her shores to foreigners. In 1637 a law was passed forbidding the landing of foreigners on the Japanese soil and the emigration of natives to foreign countries. It was also decreed that ships of more than fifty tons were not to be constructed. Thus Japan secluded herself like a hermit from the rest of the world. This policy was continued for over two hundred years.

But in the period of administration by the Tokugawa dynasty, the position of the Shogun as well as of other lords continued to deteriorate. Many of them lived an extravagant and licentious life and were heavily indebted to merchants and usurers in cities. Their family life was also full of intrigue regarding succession. But the Shogunate government was made weak by another more powerful cause, the growing restlessness of the peasants.

The restlessness of the peasants and artisans in the middle of the nineteenth century was due to their suffering under the feudal rule. The society was divided into classes and people from the lower classes

had no right of appeal against the arbitrary acts of the persons from the upper classes, whose moral decay had come to be resented by the military class. Peasants had no proprietorship in the land they held from the lords. They were taxed both by the lord and the Shogune. The peasants paid their revenue to the lords and to the state in terms of rice though money had started circulating in the country. This gave them an opportunity to exploit the peasants. Moreover, the Shogunate government and the local feudal lords had arbitrary power to take any products of their fiefs if necessary. Similarly an artisan could not set up his business unless he had been first a member of a gild and had taken necessary training. The feudal lords had restricted the number of gilds and their membership with the result that the total number of persons who could engage themselves in trade and industry was very much limited. In general there was no freedom of occupation and movement for the people and, therefore, economic progress was very slow. The government was often faced with a deficit because of the extravagance and, in the absence of fresh sources of revenue, resorted to debasement of coinage and depreciation of currency. Thus Japan suffered from all the defects of a feudal economy. The farmers who suffered the most from the depredations of the feudal lords and the government rioted and in the countryside great uneasiness prevailed. Some of them even left their homes and migrated to towns in search of employment. Hence the bonds of feudalism were already weakening.

In these circumstances, the shores of Japan were threatened by foreign naval forces. In 1852 Commodore Perry visited the Shogun on behalf of America and succeeded in making the Shogun sign a treaty of amity with the latter. The Shogun proved himself to be very weak in the face of foreign powers.

Later on he signed commercial treaties with America, England, France and Holland. The first treaties signed with foreign powers in 1858 contained three objectionable features : (1) they granted to foreign countries Consular jurisdiction implying extra territoriality ; (2) also one-sided right of fixing low customs tariff, denying Japan the right of tariff autonomy ; and (3) there was no mention of the duration of the treaties and their revision or termination.

This policy of the Shogun was resented by other feudal lords and even by the Sammurai. They saw that the Shogun was unable to protect the country against foreign powers. Some of the lords, however, were related to him and, therefore, they consented to his action ; but the lords from the south who were independent, led by Satsuma and Choshu, protested against the action of the Shogun and decided to resist foreign aggression and fired on foreign ships. But they saw the superiority of foreign arms and were converted to the view that if Japan wanted to protect herself, she must lift the ban on foreign intercourse and reform the economic and political system on Western lines. The last of the Shoguns, Yoshinobu, felt that the time had come when he must give up his power to the Emperor for centralisation of administration. But his followers were more intractable and a civil war of brief duration broke out. Finally the Shogunate was overthrown in November, 1867. While the excitement in the country had not still subsided, Emperor Komei died in 1868 and Emperor Meiji succeeded him at the tender age of sixteen. The history of modern Japan begins from the date of his enthronement.

Emperor Meiji ruled from 1868 to 1911 and succeeded in introducing a number of revolutionary reforms. The period, therefore, is known as the period of Meiji (which in the Japanese language

means great enlightenment) Restoration. The very first act of the Emperor was that intercourse with Japan was thrown open to the outside world. He accepted to receive in audience foreign representatives according to international law. This policy, however, did not meet with easy acceptance from all the people and, therefore, the Emperor issued orders providing punishment for anti-alien acts.

Soon the government was removed from Kyoto to Tokyo (formerly Yedo) and the Emperor busied himself with the work of carrying out political, social and economic reforms. The ideas which inspired him regarding the plan of reorganization were expressed in the oath which he took on assuming power. It solemnly declared that: (1) "Public meetings shall be allowed. National affairs shall be administered for the benefit of the nation. (2) Rulers and ruled alike shall devote themselves to the good of the nation. (3) All the civil or military officials shall endeavour to encourage individual industries of all kinds and to promote the activities of the people according to individual ability. (4) Moral and social defects in the nation shall be remedied. (5) Useful knowledge shall be introduced from the outside world, and thus the foundations of the Empire shall be strengthened." *

Pending the drafting of a final constitution the Emperor introduced reforms on the lines of a Parliamentary government. The administration of the country was entrusted to a cabinet consisting of seven departments: (1) Shinto or Religion, (2) Home Affairs, (3) Foreign Affairs, (4) Army and Navy, (5) Finance, (6) Justice, and (7) Legislation. A Presidential Board was set up from the heads of these departments to enforce a centralised policy. Thus the

* Uyehara, *The Industry & Trade of Japan*, p 6.

foundations of a constitutional monarchy were laid. Thereafter local assemblies of people's representatives were called, but the present constitution was not put into force until 1889. Next year the Diet was convoked. In the meanwhile to make the central authority effective, local administration was overhauled. For some time after 1868, the old boundaries of lords' domains were left undisturbed and the lords themselves were appointed as prefects. This involved, however, the creation of 300 prefectures, some small and some big. For the sake of economy and efficiency, therefore, in 1871, the number was reduced to 75 and governors were appointed by and sent from the central government.

But the most difficult task which the government was faced with was the abolition of feudalism in the country. In the Western countries the abolition of feudalism had bristled with difficulties and had often led to bloodshed. In Japan, however, the task was completed without much difficulty. The Shogun surrendered his estates and the army soon after the new Emperor was enthroned and was followed by others. In less than two weeks' time, the work was completed. Consequently the lords and the Samurai who were dispossessed of their lands from which they received an annual income were given by the government interest bearing bonds sufficient to bring them one-tenth of their former income. The lands thus freed from the control of the lords were given over to the occupying cultivators in return for annual revenue in kind or money.

The abolition of feudalism had far-reaching effects in the economic and social field. People had very little freedom in all their social and economic activities in the previous period. Under the Tokugawas the relations of the people were regulated by a Code known as "One Hundred Articles for the Samurai".

It did not protect the rights of the people sufficiently. After 1871, therefore, the work of preparing the main body of civil, criminal and commercial laws was undertaken and before the end of the century was completed. According to the new judicial system all restrictions on the freedom of movement and occupation were removed. Private property (including property in land) was recognised and its owner was given the right to sell or transfer it. Trade and industry which were closely guarded by gilds in former times were thrown open to all. At the same time all restrictions on foreign trade were removed. The combined result of these factors was that an encouragement was given to the development of industries and foreign trade. Japan began to import foreign manufactured goods and in return exported her special products like silk, tea and other hand-made articles. The Meiji Restoration was also responsible for laying the foundations of modern capitalism. In 1870 the first trading company on modern lines, Tsusho Kaisha (General Trading Co., Ltd.) was started and was followed by a banking corporation. The state also undertook the work of pioneering in factory industries and in the next two decades textile and glass works, and, coal and other mines were owned by the state. In this transformation of trade and industry the Daimyos and the Samurai played a magnificent part. For some years after the Restoration, they were paid pensions by the state, but in a few years' time they were commuted. The loss of pensions was felt keenly by the Samurai whose means were limited. Similarly, the lords were appointed as the governors of prefectures for some time, but were soon relieved of their responsibilities. These two classes were now in search of new undertakings. They had intelligence and resourcefulness and, therefore, turned their attention to business. The Samurai became traders as well as small industrialists; the latter prospected in the field

of factory industries. Since then in Japan modern industries have come to be concentrated in the hands of a few families—Mitsui, Mitsubishi, Sumitomo and Yasuda. The development of capitalism in the West and in Japan shows a sharp contrast. In the West, capitalism overthrew feudalism ; in Japan it was superimposed over a feudal structure which though abolished in law prevailed in practice. In the Western countries, therefore, it led to the development of strong individualism ; in Japan the traditional custom of obedience and loyalty to authority still held sway. There is, therefore, a difference in the relations of labour to capital in the Western countries and in Japan. The organization of the labour class against the capitalists is of recent growth. In Japan, therefore, trade unionism has not developed on militant lines.

Another reform characteristic of the new regime was the introduction of compulsory education. "Henceforth education shall be so diffused" said the Emperor, "that there shall be no ignorant family in the land and no family with an ignorant member". In 1871 the Department of Instruction was started. It divided the country into a number of educational areas and planned to provide each area with a university and a number of secondary and elementary schools. In 1872 the government enacted the Compulsory Education Act which came into force from 1876. The state and local bodies set apart 15 per cent. of their revenue for education. It is no wonder that education spread in the country very rapidly and to-day Japan ranks as one of the highly literate countries. The number of schools which was 12,000 in 1873 increased to 28,000 in 1879. A national system of education, among other factors, was the root cause of making Japan a first rate nation in the short period of half a century.

Chapter XXII

POPULATION & AGRICULTURE

Population.

One of the most perplexing problems that faces Japan to-day is the rapid growth of her population. There are indications of the country having already reached, or likely to reach very shortly, if the rate of growth remains constant, the stage of overpopulation. The government has been conscious of it. Its efforts for increasing the agricultural production, for developing manufacturing industries and for expanding Japan's export trade clearly show the influence of the pressure of population on its policy. In recent years, the population problem has figured prominently in internal politics and foreign policy. Thus like Germany and Italy, the question of population has been in the forefront in Japan.

To understand the full significance of the present-day economic conditions in Japan, a knowledge of the trend of her population would be necessary useful. The history of the growth of population could be conveniently divided into two periods—the one before and the other after the Meiji Restoration. There are two distinct trends which correspond to these two periods. They would be apparent from the statistics of growth. It may be mentioned, however, that the first official census was taken in 1920 and since then regular census figures are available for five-yearly periods. The figures for the previous years are mere estimates and allowance must be made for error. The probability of error is greater in regard to the statistics of the Tokugawa period. The following figures show the growth of population :—

Year	In millions.	Year	In millions.
1721	26,066,000	1900	43,847,000
1750	25,917,000	1910	49,184,000
1780	26,010,000	1920	55,473,000
1816	25,621,000	1925	59,058,000
1848	26,907,000	1930	64,450,000
1872	34,806,000	1935	69,251,000

The above figures indicate that population was more or less stationary in the Tokugawa period but after the Meiji Restoration it began to increase very rapidly. The rate of increase which was about 4.9 per thousand before 1875 increased to 11 by 1900 and thereafter remained steady about 14-15. Recently the annual increase of population has been in the neighbourhood of 900,000 persons.

Various explanations are given regarding the stationary size of the population before the Meiji Restoration. Firstly, it appears that the economic and social conditions of the Tokugawa period were not favourable to the growth of population. Economically the Japanese Empire consisted of as many domains as there were feudal lords each one of them pursuing a policy of self-sufficiency. Even if food could be transferred from one place to another with the permission of feudal lords, the means of transport were so poor that its transport over a long distance was almost difficult. If there was a nation-wide shortage of food, it could not be imported from outside as all foreign trade was prohibited. Agriculture was also conducted on the basis of subsistence farming and there was no possibility of accumulating food stocks. Moreover, it is likely that the farmer had little incentive to accumulate any stocks, because they were likely to be appropriated by either the feudal lords or the Shogun at any time. Hence the shortage of food resulted in the deaths of people from starvation. It is reported that the death-roll from the 22 big famines

which occurred between 1690 and 1840 was very heavy. Secondly, the country being situated in the earthquake belt, the number of deaths from earthquakes was also large. Similarly the toll of human life taken by volcanic eruptions was also considerable. In such calamities, the help which a modern government can render to its people could not be given by a loosely organized feudal state. Thus the death rate was very high in the Tokugawa period. The social conditions in Japan on the other hand affected the birth rate. The law of primogeniture governed inheritance of ancestral property. Only the eldest son was entitled to inherit it and, therefore, the other children in the family had no assured future. The Samurai, therefore, regarded the proper size of the family as one consisting of three children only. For the same reason probably the custom of abortion and infanticide prevailed among many classes of the society. It was also quite common for a young Samurai who had no chance to inherit property to postpone marriage to a late age. The birth rate, therefore, was low. Thus the economic and social factors must be held responsible for the absence of growth of population.

It is indeed surprising that this trend should suddenly change after the Meiji Restoration. Again an analysis of the causes of rapid growth since then shows that the changes brought about by the abolition of feudalism in the economic and social conditions of the country lay at the root of the change. It is evident from the study of the birth and death rates that while the former showed a rapid increase, the latter remained more or less steady. The following figures show the birth and death rates at different periods :

	Birth rate (Per 1000 inhabitants)	Death rate
1873	17.0	19.6
1911-1913	34.9	20.7
1921-1925	34.6	21.8
1926-1930	33.5	19.3
1931-1935	31.6	17.9

The rapid increase in the population of Japan was thus definitely due to the birth rate which nearly doubled in about half a century. In the Western countries with the progress of industrialisation the tendency has been towards a fall in the birth rate and if the population has grown it has been due to a relatively greater fall in the death rate. Among the industrial countries, Japan is a solitary example showing a rise in the birth rate with a steady death rate.

There were many causes responsible for the rise in the birth rate. Firstly, the attitude of the people towards the size of the family changed after the shores of Japan were thrown open to foreigners. With the experiences of the Shogun with foreign powers in the back of their mind, the Japanese had realised that to protect their independence against the aggressive Westerners, they must have an army trained like that of others. The man power of the country would depend on the size of the population. It became, therefore, a patriotic duty to allow the size of the family to grow. But this would not have come about if the economic conditions in the country were not favourable. Secondly, therefore, the abolition of feudalism removed all barriers to progress. The peasants who became the owners of their land and whose property rights were recognised began to interest themselves in agriculture. Agricultural methods were improved and the production of raw materials which could be imported was replaced by

foodcrops. More land was brought under cultivation. Thus food supply kept pace with the increase in population, at least until recent times. Thirdly, the establishment of modern industries and the introduction of modern transport acted as a powerful impetus to the growth of population. Factories, railways, banks, insurance companies, etc., provided employment to a very large number of people. This can be seen from the increase in urban and rural population. Between 1890 and 1925 while the urban population increased by 300 per cent., the increase in the rural population was only 7 per cent. Thus internal peace and economic improvement acted as two powerful factors on the increase of population of the country.

But in recent times the rate of growth and the existing size of population have created alarm in social and political circles. Some have gone to the extent of saying that Japan is already overpopulated. Considered from the point of view of density of population to the total area Japan ranks fourth in the world, the first three countries being Belgium, Holland and Great Britain. But if the density is calculated on the basis of the cultivated area—which would be proper thing to do because, in spite of her industrial progress, according to the census of 1930 nearly fifty per cent. of the population which is actively engaged draws its livelihood from agriculture—Japan ranks first in the world. The following table shows the position of Japan as compared with other countries :

Density of Population in Japan and Elsewhere
(1925)

Country	Population	Arable Land (Kilometres)	Density
Japan	59,737,000	60.2	993
Holland	47,416,000	9.2	802
United Kingdom	44,150,000	59.2	800
Belgium	7,812,000	12.2	640
Italy	40,548,000	132.3	307
Germany	62,569,000	204.8	305

The above figures certainly give cause for anxiety. There are other indications also which show that the pressure of population has become great. Thus the number of landowners is decreasing and the tenant class is increasing. With this change the number of cases of tenant troubles has been growing, particularly in the post-war years. In 1917 their number was estimated at 85 ; in 1933 it had increased to 4000. It is also known that there is a considerable unemployment in the rural areas, but it is difficult to estimate it because of the peculiar social structure in which it is the duty of every family to support the unemployed and the indigent. But these indications are not sufficient to establish whether there is overpopulation or not. If the population is excessive, it brings about a fall in the standard of living. Crocker, therefore, suggests that the following tests should be applied to find out whether the wealth and welfare of the average Japanese has improved with the increase in population or has suffered : (1) the relation of National Wealth to Population ; (2) the relation of National Income to Population ; (3) increase or decrease in the per capita consumption of rice which is the staple food of the Japanese ; (4) movement in Real Wages ; and (5) the operation or non-operation

of the law of Diminishing Returns in agriculture.*

According to Crocker, the National Wealth of Japan in 1913 was estimated at 32,043 million yen; in 1924 it was 102,343 million yen. The per capita national wealth after making adjustment for price changes for the two years was estimated at 606 yen and 720 yen respectively. The national income for the years 1913 and 1925 was 2,334 million yen and 13,382 million yen respectively; the per capita income after making adjustment for price changes was 44 yen and 103 yen respectively. Rice constitutes the main food of the Japanese and, therefore, if the pressure of population has become too great there should be a marked decline in its consumption. The average per capita consumption of rice for the period 1900-13 was 1.81 quintals; it rose to 2.10 quintals in 1927. Though real wages are capable of changing from influences other than those of the population, pronounced fall in them over a certain period may result from the pressure of labour seeking employment. The movement of wage and price indices do not show that the real wages have been affected adversely. Though, therefore, the foregoing statistics show that the growth of population has not affected the welfare of the Japanese adversely, they cannot be completely relied upon as conclusive proof of a healthy growth of population because there are admitted defects in their calculation. The only criterion, therefore, which can be regarded as reliable is the operation of the law of diminishing returns. Here also unless correct statistics are available to show changes in the amount of labour and capital applied to a given piece of land over a period and its yield, no correct conclusion can be arrived at. But Crocker comes to the conclusion from whatever statistics are available

* Crocker, *The Japanese Population Problem*, p. 56, et seq.

and from personal enquiries in Japan that in recent years more fertilizers and labour were used in raising a given amount of produce. This opinion is also supported by the view of Freda Utley that in recent years though the production per acre has increased it shows a decline per agricultural worker. But Prof. T. Ueda emphatically maintains that "the population of rural districts has not only reached saturation point, but a state of actual overpopulation exists". In support of his contention he points out that with the difficulty of earning livelihood in rural areas age groups upto 44 show a decline ; whereas the age groups above 44 show signs of increasing. All these points go to show that the pressure of population in the rural areas has become heavy and has become a cause for anxiety in Japan.

If this is the present state of population in Japan, the future appears to be more gloomy. Prof. T. Ueda has made a study of the future trend of population. According to him, after making an allowance for changes in the birth rate the population for the next thirty years would grow as follows :

Year	In millions	Year	In millions
1945	75.2	1960	83.6
1950	78.4	1965	85.7
1955	81.1	1970	87.7

If the above estimate is to be taken as accurate the population would grow by about one-third in less than thirty years' time. Another calculation has been made by Mr. M. Inouye, a Japanese business man. He estimates that by 1965, if the present rate of progress continues, the population would be 108 millions. Of the two estimates the first appears to be more correct because of the allowance made for expected changes in the birth rate. Both the estimates, however, lay

stress on the same point, the difficulty of supporting such a large population from the available resources.

Is it possible for Japan to support this growing population without a lowering of the standard of living? The answer to this would depend on a number of factors. It would be natural to enquire in the first instance as to whether or not there is any scope for extension of agriculture. There are very little hopes in this direction. All the available arable land has been brought under the plough. In fact in the absence of easily available land, an attempt has been made to cultivate, where possible, the slopes of hills. The small size of the agricultural holding and the property of farmers make mechanisation of agriculture and intensive cultivation very difficult if not impossible. There are about 5 million acres of land which could be reclaimed for cultivation. But the cost of reclamation would be so heavy that not more than a few thousands of acres of land could be brought under cultivation in the immediate near future. There is, therefore, very little hope of an increase in the production of food at home.

The second factor having a bearing on this problem is the possibility of emigration to foreign lands or colonisation. In this respect Japan has been more unfortunate than the Western countries. All the empty spaces of the earth have been occupied by the powerful Western countries. She has no doubt made an attempt to expand the boundaries of her Empire in the past. After the war with China in 1895 she got Formosa and Pescadores. Her success against Russia in 1904-05 gave her a dominant position in the South Manchuria. In the Peace Treaty of Versailles she secured a mandate over the German islands in the Pacific. In 1931 she annexed Manchuria to her Empire. But Japan has not been able to colonise on a large scale in these islands because of the local hostility.

Similarly because of the restrictions in foreign countries on immigration, since 1920 the number of annual emigration has never exceeded 13,000. But in the same period a large number of Japanese have returned home. Thus the total number of the Japanese residents in foreign countries has been very small. Most of them, however, are engaged in business.

There are, therefore, only two alternatives for Japan—either she must check the growth of population or develop her industries and export trade so as to pay for enough imported food. The social structure of Japan is such that the prospects of the first alternative are not very bright. "In the opinion of some observers", says Croker, "there are factors, even more powerful than those they find in Roman Catholic countries, working against a fall in this very high rate. Social customs and the importance which religious tradition gives to leaving male heirs to carry on the veneration of the family ancestors allow of slight hope, in their opinion, for a thinning, rather the promise of a thickening of the present density". Until recent times, even the discussion of birth-control was regarded as a 'dangerous thought' and Mrs. Margaret Sanger was refused permission to disseminate information on the use of contraceptives. But since 1925 a change has come in the attitude of the government and the people. After the findings of the Commission on Food and Population (1927) significantly pointed out the dangers of unchecked growth, their attention has been turned to birth control. But the influence of religion is so great that it may not be possible for population to be checked by this method. The only alternative, therefore, left for Japan is the intensification of industrial production. But the peculiar difficulties of raw materials and markets make their progress uncertain. Hence to secure both of them, a clash between Japan and the old Empires.

appears to be inevitable. This has occurred. The dreams of Tanaka to expand the empire have found sponsors in the present government.

Agriculture

Japan was an agricultural country before 1868 with 80-85% of the population being dependent on agriculture. To-day if the Japanese economic life is viewed from the point of production, foreign trade and capital investment, she is rapidly becoming an industrial country ; but considered from the point of occupations, she is still an agricultural country. According to the census of 1930, out of a total population of 64 millions, 29 millions were actively engaged in one occupation or the other. From this occupied population nearly 14 millions (nearly 47%) were drawing their livelihood from agriculture (tillage, sericulture, and stock-breeding). The same percentage in 1920 was 51 and thus there was a slight decline in the agricultural population. The percentage of agricultural to the total number of households which was 52.4 in 1920 declined to 44.4 in 1930. In spite of this recent decline, the importance of agriculture in the Japanese economy remains unaffected because of the fact that it is one occupation which gives employment to the largest number.

But what is surprising is not the predominance of agriculture as the small size of the arable land. Japan is a hilly country and, therefore, the total arable land is not more than 18 per cent. of the area of the country. Of this, after extension of cultivation to all kinds of lands from time to time, the total cultivated area is only 15 per cent. This percentage is the lowest compared to any great nation in the world. At the end of 1933, the percentages of the cultivated to the total area in different countries were : 22.3% in Great Britain, 43.7% in Germany, 39.4% in France, 41.4% in

Italy and 18% in the United States. With a very large population living on such a small area, the average size of the holding is 0.086 hectares (hectare = 2.4 acres). In this respect also the Japanese agriculture compares unfavourably with other countries. The average size of holding in Great Britain, Germany, France, Italy and U. S. A. is 0.124, 0.314, 0.512, 0.315, and 0.362 hectares respectively. If the agricultural households are distributed according to the size of holding they cultivate, 34.5% cultivate an area of 1.20 acres, 34.3% cultivate an area varying between 1.20 and 2.50 acres and 22% work fields varying between 2.5 and 5 acres. Only 1.4% work holdings exceeding 12.5 acres. This means that nearly 69% of the households work holdings of less than 25 acres. These figures amply prove that not only the agricultural resources of Japan are limited but that there are almost insurmountable difficulties in the way of progress.

As regards the future possibilities of extending the arable area, the Temporary Industrial Investigation Bureau estimated in 1918 that the total land that could be brought under cultivation by reclamation was 1,650,000 cho (cho = 2.45 acres), i.e., about 5 million acres. Even if this entire land were brought under the plough, it would add less than one acre to the present average holding. The problem of bringing this land under cultivation, however, bristles with difficulties and in view of them the Commission on Food and Population proposed that an attempt should be made for the next twenty-five years to reclaim land at the rate of 75,000 acres per year. Assuming the success of this plan, the percentage of arable to total land in Japan would still be smaller than that of any other great country. The following figures show the progress of the irrigated, unirrigated and total cultivated area in the 20th century:

Area Under Cultivation
(In million cho)

	Irrigated	Unirrigated	Total
1905	2.8	2.5	5.3
1923	3.0	3.0	6.0
1929	3.1	2.7	5.8
1934	3.2	2.8	6.0

The above figures clearly show the slackening of the progress in the extension of cultivated area since 1923. Before that year for nearly twenty years the area showed an increase. The recent tendency may be attributed to two factors, the difficulty of securing cultivable land and the continuous fall in agricultural prices in the post-war years.

Faced with the lack of additional cultivable land, the Japanese farmers have resorted to intensive cultivation of the existing land. Even the slopes of hills, as said before, have been brought under the plough. The use of fertilizers is made on a very large scale. The annual expenditure on this account in recent years is estimated to be about 520 million yen. In spite of the unfavourable size of holding, the use of mechanical appliances is steadily making progress among the farmers. An additional factor which has checked progress in this direction is the lack of capital. To-day there is one electric motor for every 60 farmers; one rice-polishing machine for every 60 farmers; and only one rice hulling machine for every 120 farmers. If the yield of rice per acre is regarded as indicative of the general improvement in methods, then it has increased from the average of 24.16 bushels per acre for the period 1880-84 to 37.7 bushels per acre for the period 1924-28. In this respect, among the rice producing countries, Japan ranks first.

The principal food crops that are grown in Japan are rice, wheat and barley. Of these rice constitutes

the most important crop being the staple food of the people. Nearly 53% of the cultivated area is under rice. The total production of these commodities at different periods is given below :—

	Rice	Barley	Wheat
	(In million koku)		
1878-82	29.9	—	—
1910	54.4	9.2	4.6
1934	70.8	6.7	9.4

The above figures indicate that as a result of the extension of agricultural area, its redistribution among different crops and intensive methods of cultivation, the total production of rice and wheat has considerably increased, but that of barley has fallen. The decline in barley is largely due to its being replaced by wheat in the consumption of the people. But in spite of this growth in production, the home supply has proved inadequate for the population which is growing at a still faster rate. Japan has been importing, as may be seen from the following figures, increasing quantities of food from her colonies or foreign countries for which she has to pay obviously in either manufactured goods or services or specie :

	Rice	Barley	Wheat
	(In koku)		
1910	1,441,000	2,678	360,000
1934	14,249,000	92,000	3,588,000

As regards the position of agriculture in relation to the raw materials of industries, excepting silk there is no raw material which is produced in considerable quantities. No doubt some quantities of tobacco, sugarcane, rape-seed, etc., are produced, but the total under them is not more than 4% of the cultivated area.

The economic position of the Japanese farmers is

one of the most serious social problems of to-day. In the revolution of 1868 feudalism was abolished and land came directly in the possession of cultivating farmers. But some of the land belonging to the **daimyos** was mortgaged to merchants and usurers before the revolution and in 1871, therefore, their rights were recognised with the result that those who cultivated such land remained as tenants. Moreover, the new government ordered the peasants to pay their taxes to the state in money instead of in rice as before. The peasants had very little experience of money economy ; there were few markets where they could sell their crops ; but the condition of transport was so miserable that even if they intended to sell in these markets they could not summon up courage to undertake the journey. The state taxation also became gradually heavy because of the large expenditure of the government on paying compensation to the **daimyos** and **Samurai**, subsidies to industries and costs of the wars it waged. On the one hand the farmer was receiving a low price for his produce and on the other a big slice from his income was taken away by the government. He was unable to meet the expenses of his household and, therefore, land gradually passed into the hands of moneylenders. The small proprietor-farmers, therefore, became tenants and paid rent to their landlords in terms of rice, a system continued from the feudal days. Thus though feudalism was abolished, landlordism reappeared in a different form. To-day the farmers of Japan are divided into three classes : (1) landowners, (2) small tenant farmers, and (3) partly proprietors and partly tenants. The following table shows the distribution of land among the three classes :*

* Mitsubishi Economic Research Bureau, Japanese Trade and Industry, p. 154.

Tenants and Proprietor Farmers (%)

	Households			Area under cultivation	
	Proprietors		Tenants and	Proprietors	
	Proprietors	Tenants		Tenants	Proprietors
1910	33.4	27.4	39.2	54.8	45.2
1920	31.3	28.1	40.6	54.1	45.9
1930	31.1	26.5	42.3	52.3	47.7
1934	31.0	26.8	42.2	53.0	47.0

The above table shows that nearly 70% of the farming households are either tenants for all or a part of the land they cultivate. Nearly half of the total cultivated area is cultivated by tenants. And many of the small proprietors, as their holdings are small and insufficient to maintain their families, rent land from others. It is estimated that these tenants pay rents to their landlords in rice to the extent of 50 to 60 per cent of their produce. Of the remainder a part is spent on paying taxes and interest and on buying fertilizers. The tenant farmers have been compelled to borrow by paying heavy rates of interest. With the continuous fall in prices in the post-war years, both the tenants and small proprietors were faced with difficulties. The total agricultural debt has considerably increased. In 1911 it was estimated at 746 million yen or 135 yen per agricultural household. In 1929 and 1932 it was estimated to have increased to 4,000 million yen and 4717 million yen respectively. In the latter year the debt burden per household was 840 yen. And it was increasing at the rate of 100 yen per year because of accumulated arrears. The present agricultural debt is therefore estimated to be 6000 million yen or 1000 yen per household. Recently the Ministry of Agriculture and

Forestry compiled data on the farm debt situation in 29 prefectures. According to it in one prefecture alone nearly 80% of the households were in debt. The average debt (excluding that of the landowners) was 813 yen. The following table shows the rates of interest paid and the methods of raising loans used by the farmers:[†]

Rates of interest	Mortgaged	Unmortgaged	Total
	%	%	%
Less than 6%	4.3	3.8	8.1
6-8%	9.9	3.2	13.1
8-10%	20.3	13.3	33.6
10-12%	14.7	23.9	38.6
Over 12%	1.7	4.9	6.6
Totals	50.9	49.1	100

The above table shows that nearly 72% of the debts were incurred at interest rates varying between 8 to 12 per cent. It is estimated that if the burden of the total interest charges on Japanese agriculture are related to the annual value of produce, then it accounts for nearly fifty per cent. of it. In recent years, therefore, the distress of farmers was very great and the government had to introduce some relief measures.

One of the great handicaps from which the small agriculturist in Japan suffered for years was the lack of organized sources of rural credit and, therefore, he was borrowing from moneylenders at high rates of interest. He also needed help in other activities connected with agriculture if his occupation was to be made paying. The Meiji government made a beginning in the establishment of institutions which would supply him with long and short term credit. About 1891 Viscount Y. Shingawa and Count T. Hirata proposed the establishment of co-operative societies on

[†] Freda Utley, *Japan's Feet of Clay*, p. 130.

the German lines. But they did not succeed in receiving the support of the Diet until 1900. In that year a law was passed to permit the establishment of co-operative societies of four kinds—credit, purchase, sale and miscellaneous. This law marked the beginning of the co-operative movement which to-day occupies an important position in the Japanese agriculture. In 1905 the Central Union of Co-operative Societies was also started. A number of credit, purchase and sale societies were started before the war and they became members of this organization. Government also encouraged the movement by permitting the purchase societies to undertake product'v activities, by reducing government taxation and by introducing government inspection. Before the war the movement was mainly rural.

During and after the war the movement spread to urban areas, mostly for the purpose of supplying credit. During the first two years of the war when prices of agricultural goods fell steeply, the government passed the Warehousing Business Law to make arrangement for advances to agriculturist against warehoused goods. It planned the establishment of 4,100 warehouses so as to provide at least one warehouse to every three villages. The co-operative societies took advantage of this law and by 1925 they had under their control 1,741 warehouses. In 1920 the law was again amended so as to permit the construction of dwelling houses, hospitals, bath-houses, etc., on co-operative principles. In the same year a Central Co-operative Bank was established which started working in 1923. In the next year a Wholesale Co-operative Society was established. Thus the movement spread very rapidly during and after the war and proved of great use in the crisis following the earthquake of 1923. In 1927 there were in all 14,000 societies. After the financial crisis of this year

the movement was reorganized and consolidated and the number of societies was reduced. The number in 1934 was about 12,000. The co-operative societies have not only supplied finance but helped the farmers in making purchases and sales of goods. They have also run public utility concerns like the electricity and water-supply companies. Assessing the progress of the movement Venn writes: "Too much attention should not be paid to the merely statistical position of co-operation in Japan, where, as even in Germany and other peasant states of Europe, only a fraction of the potential membership has been obtained; rather should the pertinacity of its founders be admired and the difficulties envisaged that accompanied its establishment in a country so recently freed from feudalism, often disturbed by social and physical convulsions and always diverted by the imposition of Western influence." *

For the supply of long term finance, in 1897 the Japanese Mortgage Bank (Hypothec Bank) was established in Tokyo and branch banks of agriculture and industry were established in each prefecture. † In 1921 in the financial reorganization of the country, the latter were merged with the former. The Mortgage Bank advanced money to farmers on the mortgages of real property. It raised the necessary funds by issuing debentures which were partly subscribed to by the government from the funds of the Deposit Bureau, the central organization for postal savings. At the end of 1933 the long period loans given by the Bank amounted to 750 million yen

The agricultural policy of the Japanese government was mainly restricted, until the Great War, to

* Venn, the Foundations of Agricultural Economics, p. 336.

† See Kobayashi, The Basic Industries and Social History of Japan, p. 111.

bringing more land under cultivation, improving methods and encouraging the cultivation of special crops greatly needed by the country. Thus before the war, encouraged by the government, the production of fertilizers for use in agriculture increased from 22 million yen to 56 million yen between 1905 and 1914, an increase of nearly 250 per cent. During the first two years of the war when the price of rice fell, the Okuma cabinet (1914-16) made an attempt to check the fall by purchasing large quantities of rice. But in the post-war period, excepting for a few years, the prices of many commodities, chiefly of rice, slumped and rendered the position of farmers difficult. The Government had to take a more active interest in the farmers to protect them from complete ruin. The measures taken by it fall into three categories: (1) price stabilisation, (2) relief measures, and (3) permanent improvements.*

The first attempt at price stabilisation was made in connection with rice, the most important crop. By the Rice Law of 1921 government was given power to adjust demand for and supply of it. Price of rice was falling because of the excess supply of home grown and imported rice. It was intended that the government should make purchases of rice. The necessary funds, to begin with 200 million yen, were provided by the Rice Adjustment Special Account Law. But as mere purchases did not help to restore price, by a law of 1925, power was given to the government to control prices. For some time, it appeared that the government had succeeded in checking the fall; but the success proved to be short-lived. In the following years the price of rice fell in sympathy with world prices. The fall was serious after 1929 when there

* for details, see Mitsubishi Economic Research Bureau, Japanese Trade and Industry, pp. 175-81.

was almost an agricultural crisis in Japan. In 1931, therefore, the Rice Law was amended and the funds of the government were increased to 350 million yen, import of rice was made subject to license and the government was authorised to make purchases when the price was below a certain level or sell when it arose above a certain maximum. But this policy had little effect particularly because of the limitations placed on the purchases by the government. Next year, therefore, the Law was again amended and the total fund was increased ; imports were to be controlled on monthly basis and the government was given power to make purchases according to its discretion. Even this measure could not improve the situation. In November, 1933, therefore, a more comprehensive law was passed, the chief provisions of which were : (1) the government was authorised to fix minimum and maximum prices ; the minimum was to be fixed after taking into consideration the costs of production, the cost of living and the general prices ; (2) the fund was increased to 850 million yen and could be increased by another 300 millions if necessary ; (3) the imports of colonial rice were regulated on the basis of monthly quota ; (4) the imports of foreign rice were made subject to license ; and (5) the whole work of price regulation was entrusted to a specially established Rice Bureau. The rice policy of the government had to avoid two dangers. The price of rice was not to be allowed to fall too low lest the farmers should suffer. It was not to be allowed to rise too high, lest the export industries should suffer in their competitive power by a rise in wages following a rise in the cost of living. Thus it had to steer clear of the Scylla of agricultural distress and Charybdis of industrial decline. The following index of the price of rice shows the measure of government success :

Base 1925 = 100			
1929	70.4	1933	51.7
1930	62.2	1934	63.0
1931	44.6	1935	71.6
1932	50.9		

With the fall in their income, the farmers were badly in need of long-term and short-term finance. Many of the small farmers were mortgaging their land to relieve themselves of the immediate urgent demands. In 1922 the government decided to advance money to such farmers from the Reserve Fund of the Post Office Life Insurance. By 1925 nearly 17 million yen were advanced in this manner. On the findings of the Tenancy Investigation Committee of 1925 the government also decided on a plan of giving assistance and protection to future tenant proprietors. For the following 25 years loans and subsidies amounting to 468,500,000 yen and 101,000,000 yen respectively were to be advanced to them for the purchase of land. In the crisis of 1931-32, the distress spread to nearly all the farmers who were unable to repay their loans to co-operative and other financial institutions. Foreclosure of mortgages would have made the crisis disastrous. The government, therefore, passed two laws—the Special Loans and Loss Compensation Law (1932) and the Immovables and Mortgage Loan and Loss Compensation Law (1933). Under these laws the Central Co-operative Bank and the Mortgage Bank were encouraged to make advances to farmers to meet their short and long term obligations with a guarantee from the government to make good the loss upto a certain limit. Suitable changes in taxation were also made and relief works were started to help the farmers to increase their cash income.

It was, however, felt by the government that agriculture needed permanent improvements to make the position of farmers more secure. In 1932 the

Agricultural Economic Recovery Bureau was set up with a country-wide supporting organization. Its duty is to bring about "equitable division and utilization of land, capital and labour, the improvement in management, the control of production and distribution, the lowering of the cost of production and other expenses, the reform of various organizations related to agriculture, and the training of leaders among the farmers". The agrarian discontent in Japan has not still subsided and the tenants and agricultural labourers have been loudly demanding sweeping changes in the agricultural structure.

Chapter XXIII

INDUSTRIAL PROGRESS

The influence of Western industrialism made itself felt in Japan after 1858 when she concluded commercial treaties with foreign countries. Foreign manufactured goods began to trickle into Japan. The superiority of arms manufactured in the Western countries in particular made a great impression on the Japanese who desired to emulate their example. When feudalism was abolished finally in 1868, the way was cleared for the introduction of factory industries on Western lines. The Government also realised the need for their establishment to prepare the country for her defence against foreign aggression. From the keen desire of foreign countries to conclude commercial treaties as the beginning of political domination, they feared that Japan would be not only economically exploited by foreigners but would be driven into their stranglehold of political domination. She would become the market for the manufactures of Western countries in payment for which she had nothing to export except silk and copper. She, therefore, feared

the loss of precious metals. The external trade would be also monopolised by foreigners and, therefore, its incidental profits would go to them. A policy of drift, therefore, was ill-advised. It was necessary for Japan to forthwith undertake the industrialisation of the country.

But unlike England and the U. S. A., there was no possibility of private enterprise undertaking the construction of railways, factories, steamships, etc. The country had just emerged from the trammels of feudalism which had killed all initiative in all classes except that of the **daimyos**. The capital resources of the country also were poor. The people who were mainly agriculturists were taught by their religion to shun materialism and, therefore, they had no incentive to save. Moreover they were so ruthlessly exploited by the feudal lords that there was very little saving. There was also no occupation in the feudal structure which could give rise to a moneyed class. England, Holland and New England which had experienced a commercial revolution before the industrial revolution had accumulated capital which they could sink in new inventions. Japan did not experience any commercial revolution because of her seclusion. Moreover excepting for silk-reeling, hand-spinning and hand-weaving and the making of copper and bronze wares there were no industries worth being mentioned before the Meiji Restoration. Even then their production was small and crude. Thus Japan lacked not only in capital but in industrial traditions also, and, therefore, there was a dearth of trained labour. For all these reasons, it was not possible for private enterprise to undertake industrialisation, at least at the rate at which the interests of the country required.

From 1868 to 1880, therefore, the industrial and transport enterprises were mainly started by the

Government. Railways, telegraph and telephone, and, silk reeling, cotton spinning, woollen and glass factories were started by it from the funds raised in foreign countries. For the work of erection, the services of foreign technicians were engaged. In 1872 there were nearly 200 Dutch, German and French technicians in the service of the government who were paid £ 53,000 as annual salary from the poor revenues of the state which hardly amounted to £ 5,200,000.* Thus in 1872 a silk reeling factory was established at Tokyo with the help of a French expert ; similarly in 1877 a woollen factory was established with the help of a German ; and in 1879 a glass factory was established with the help of an Englishman. When these industries were well on their way, by passing a suitable law, the government transferred them to private enterprise. "Although the State itself established and for sometime controlled the majority of the industries and commercial services which now exist", says Prof. Allen, "it did not retain the ownership or administration of them once they were firmly rooted."†

But the state did not completely withdraw its support to industries. It pursued a policy of general economic improvement which was bound to help industrial progress. Thus in 1882 the Bank of Japan was established and the currency was reorganised by giving the monopoly of note issue to it. In 1884 rules were framed for the organization of guilds of industrial groups. In 1887 the Yokohama Specie Bank was started to finance foreign trade. In 1890 the Commercial Law was passed to regulate commercial and industrial enterprises. Three years after, the Bank Act and the Stock Exchange Act were passed to

* Nitobe, Japan, p. 109.

† Hubbard, Eastern Industrialisation and Its Effect on the West, p. 67.

organize on sound lines the money and capital markets. Thus by 1893 the period of experiments was over. The paid-up capital of all companies in that year was estimated at 232 million yen which was equal to nearly twelve times the figure at the beginning of the period. Of this capital 47.68% was held by trading and banking concerns, 29.14% by transport concerns and 22.31% by manufacturing companies. The number of industrial workers engaged in factories employing more than ten labourers was 381,000.

The war with China in 1894 gave, as wars generally do, an encouragement to the industrial development. Japan came out successful from it and obtained, among other things, an indemnity of 200 million taels which proved useful in introducing the gold standard and brought her currency in line with other foreign currencies. The success of Japan also brought about a change in the attitude of foreign countries towards her in the matter of commercial treaties. The treaties which she had signed in 1858 were one-sided and had restricted her freedom regarding tariff. Those treaties were now revised and she became free to impose import duties. Near the end of the century she gave encouragement to the shipbuilding and chemical industries, the first to encourage the export trade and the second to aid the improvements in agriculture. By the end of the century, the effect of industrialisation began to be seen in the character of export trade. Manufactured goods figured more and more in it. At the end of the decade following the Sino-Japanese war, imports had increased six times measured by value and four times measured by volume: exports had increased five times and three times respectively. The paid-up capital of companies had increased to 887 million yen: of this capital 50.89% was held by trading and banking concerns, 29.56% by transport and 19.19% by industrial companies.

Hitherto, therefore, the general tendency was to invest in commercial and transport companies.

The Russo-Japanese war (1904-05) which occurred just after ten years from the Sino-Japanese war had a similar stimulating effect. Not only her industrial production increased during and after the war, but after its end in her favour, the foreign trade of Japan increased with strides and her credit in the World's money markets was enhanced and she was able to borrow on an extensive scale. Japan's foreign loans which had aggregated only £ 13 millions before the war increased by £ 107 millions in the next two years. The bulk of this amount found its way into industrial investment. In the same two years another £ 70 millions were borrowed by private companies and municipalities. Before the Great War, therefore, the industries which made progress were metal, electrical, rubber and shipbuilding. Her foreign trade also made an equally remarkable progress. Before the war the total paid-up capital invested in various companies reached the figure of 1,983 million yen ; of this capital 41.23% was held by trading and banking concerns, 11.78% by transport and 36.08% by manufacturing companies. Thus there was a sharp break from the old trend of investment. Capital began to flow into industrial concerns. The number of factory workers and miners increased to 1,180,000. Thus Japan had laid the foundations of industrialism on the Western lines and had freed herself from the domination of foreign countries in her commercial policy. Her foreign trade, however, was mainly with the Asiatic countries and North America. China absorbed nearly 90 per cent. of her cotton products and the U. S. A. took about the whole of her silk exports. The reputation of her goods was still dubious and, therefore, other countries did not regard her as a serious competitor.

The Great War came as a golden opportunity to Japan. The Western countries and their industries were preoccupied with the demands of a ghastly war. They could not send goods to the Eastern markets because of the control placed by their governments. Even whatever goods they could spare and were uncontrolled could not be exported because of the lack of shipping space. On the contrary Japan was involved in the war on the side of the Allies only to a limited extent and, therefore, she was in a position to make the best out of the situation. She also possessed a mercantile marine which could traverse the Eastern waters with comparative freedom from war risks. During the four years of the war her foreign trade, particularly exports, increased to an unprecedented size. Her total favourable balance of trade reached a figure of 1,400,000,000 yen. Her excess of invisible exports also reached the figure of 1,400,000,000 yen. Thus she had a total favourable balance of payments amounting to 2,800,000,000 yen. The new markets which she penetrated or the markets in which she strengthened her former foothold were India, Netherlands East Indies, South America and certain parts of Africa and Europe. This phenomenal growth in her trade had a magic effect on her industries. There was a feverish industrial activity during the four years. The new capital investment increased annually at a rate varying between 100 to 150 million yen. In 1918 the total paid-up capital was 4,707 million yen, of which 41.23% was held by trading and banking concerns, 11.78% by transport, 38.08% by manufacturing and 9.94% by mining companies. The industrial progress of the country is indicated by the increase in the factory employment by 63% ; in power consumption by 34% ; in the capacity of electric motors and consumption of coal by 206% and 47% respectively ; in spindle capacity by 44% ; in silk out-

put by 55% ; and in the output of iron and steel by 143% and 116% respectively. Among the industries which showed a striking expansion were the iron and steel and chemical industries. The government stimulated the development of the former industry by exempting the newly constructed plants from business and income tax for a period of ten years from July, 1917. Plants with a capacity in excess of 35,000 tons were allowed to import iron ore and construction materials free of import duty. Before the War, there were 8 plants with a capacity of over 5,000 tons and 42 with a capacity under 5,000 tons ; in 1918 the former increased to 14 and the latter to 166. The government played a magnificent part in this development. In 1914 it set up an organization known as the Society for the Encouragement of Home Manufactures (Kokusan Shoreikai). Later on a number of commissions were set up to study the effects of the war on industries and to suggest measures to facilitate their change to peace-time economy with the minimum of dislocation. The industrial boom developed partly by war and partly by inflationary conditions continued upto 1920 after which some of the industries were faced with a slump. "The end of the boom in 1920 found Japan", says Professor Allen, "far more industrialised than in 1914, a creditor instead of debtor country, and with short term balances abroad amounting to over 1,300 million yen. Her domestic gold reserves had also greatly increased."

The revival of Western competition not only in her foreign markets but even in her home market after 1920 brought about a sharp economic crisis in Japan. Many of the companies which had worked profitably in the period of the war were unable to face the competition, home as well as foreign. Industrial output fell, dividends declined and unemployment increased. The discouraging financial results would have conti-

nued unless some industries were prepared to reckon with the fact that much of their capital was not fully represented by assets and, therefore, required to be written off. In other cases there was an urgent need for reducing capital which was extended to meet wartime demand. The industrialists carried out a capital reorganization in 1921-22 and capital to the extent of 980 million yen was reduced. But before the industry could revive it was struck by another blow, the earthquake of 1923. By 1925 it appeared that industrial prospects were becoming bright, but again disillusionment came soon. The financial crisis of 1927 which was no doubt a legacy of the war again gave a setback to economic recovery. A number of banks and industrial companies failed. Among these industrial companies many were those which had avoided liquidation in the reorganization of 1921-22. Between 1927 and 1929 a fresh attempt was made to reorganize and rationalize industries. But the depression of 1929 again affected them adversely and the future looked to be very gloomy. In 1930 the government decided to restore the gold standard, which was given up during the war, with the expectation that it would help to expand export trade and, therefore, industries. But the expectation of the government proved to be wrong. The yen was restored to its pre-war parity with the dollar. Comparing the price levels in the U. S. A. and Japan in the previous period, it was clear that the yen was overvalued by at least ten per cent.* To maintain the exchange parity governments had to deflate. It is no wonder that the results expected from the stabilisation were not realised. Prices fell steeply while the cost structure remained substantially high. Foreign trade continued to decline and the unemploy-

* Allen: *Japanese Industry, Its Recent Development and Present Condition*, pp. 9-10.

ment figures continued to rise. At the same time the agricultural situation was becoming more critical and the agrarian distress was great.

Between 1931 and 1935 government had to intervene in industries and trade to make another great effort to revive them. In June 1930 the Industrial Rationalization Bureau was set up with the vague object of the reconstruction of the entire economic system. In August, 1931 the Staple Industries Control Act was passed to bring about cartel agreements among industries to check internal competition and to rationalize them. But before the government could proceed with the work, a novel situation was created by the abandonment of the gold standard by England and by other countries. In December, 1931 Japan followed them in leaving the gold standard and in allowing the yen to depreciate. In the next few years, before the outbreak of the Sino-Japanese war, the Japanese industries progressed very rapidly unlike those of other countries because of the influence of three factors: (1) the depreciation of yen and the efforts of Japan to break through the ring created round her trade by other countries by raising tariff walls, inter-imperial agreements and anti-depreciation measures by developing efficiency and by keeping down the costs of production by manipulating price levels; (2) the opening of Manchuria to Japanese investment and trade; (3) and the government expenditure on armaments. During these years not only industrial production increased but there were striking changes in the composition of her industries. In 1933 the total capital of all companies reached the figure of 14,389 million yen of which 33.76% was held by trading and banking concerns, 10.83% by transport, 38.77% by manufacturing and 4.60% by mining companies. The number of factories increased from 31,717 in 1914 to 85,174 in 1935. The number of factory work-

ers and miners increased from 1,180,000 before the war to 2,461,000 in 1935. The following statistics show the increase in the production of the various industries after the Great War :

Value of Industrial Output
(In million Yen)

	1914	1925*	1930	1933
Textile	620	3,215	2,027	2914
Metal Products	48	421	526	878
Machinery &				
Tools	110	459	615	888
Ceramic goods	34	181	158	226
Chemicals	176	757	924	1288
Lumber &				
Wood Products	28	175	157	189
Printing &				
Binding	26	164	179	181
Food-stuffs	220	1,097	950	1077
All others	106	559	426	290
Total	1368	7,028	5962	7871

The above table shows the striking progress achieved by the Japanese industries, in particular textile, metal, machinery and tools, chemical and food-stuff industries. As the figures are expressed in value they are influenced by the prevailing price level in the above-mentioned years. Hence the figures of 1925 give an exaggerated view of the production of industries. But there is no doubt that the industries have made a rapid progress. What is more surprising, however, is that Japan has made progress during the years of depression when in the rest of the world governments were struggling to revive their indus-

* The value is partly inflated because of the depreciation of the yen which was still off gold.

trial production which had fallen after the depression had started. The quantitative progress of industrial production in the four years of the depression compared with the production in 1913 is shown by the following index :

Index Number of Quantity of Industrial Production †
(The Oriental Economist)

1913	100	1932	346
1930	322	1933	422
1931	275	1934	554

Industrial Structure

Japan has risen to the position of an industrial power comparable with that of the Western countries. But there are certain features of her industrial structure which mark her out as different from them. The four points of difference are: (1) the secondary place of industry in the economy of the country; (2) the predominance of small scale industry; (3) the dominance of an industrial and financial oligarchy; and (4) the lop-sided development of industries which has been partly rectified in recent years. As regards the first point, the census of 1930 shows how the population was occupied :

Numbers in Each Category of Occupied Persons
(Adults Only)

	Millions		Millions
Total Population	64	Transport and Communications	.93
Total Occupied Population	29.12	Public service and Professions	2.05
Agriculture	14.04	Fisheries	.58
Mining	.30	Domestic Occupations	.81
Manufactures	5.41	All other Occupations	.05
Trade	4.95		

†Uyehara, The Industry and Trade of Japan, p. 43.

The above figures show that agriculture still occupies a predominant position in the Japanese economy ; industry comes second. Out of the 5.4 million people engaged in industry about 2.0 million are factory workers, 1.2 million are small independent producers in industry and transport, and 1.9 million are casual workers. Thus factory workers were only 7% of the total occupied population, and 36% of the total industrial population. There has been also no substantial change in the industrial population between the censuses of 1920 and 1930. The following comparison of the percentages of industrial population to the total population in the various countries would show that Japan has a smaller industrial population than that of any Western or North American country :

Percentage of Population in Industry*

Japan	18.5 (1930)	Germany	38.1 (1925)
Switzerland	44.6 (1930)	France	31.2 (1926)
Great Britain	39.7 (1921)	Czechoslovakia	40.4 (1930)
Belgium	39.9 (1920)	Canada	28.5 (1931)
Holland	37.2 (1930)	U. S. A.	26.9 (1930)

The industrial structure of Japan is characterised by the predominance of small and medium-sized industries. Their importance is growing from year to year. Thus unlike the Western countries or the U. S. A. industrialisation in Japan has not resulted in the elimination of the small units which curiously enough are able to compete in the international markets. The position of small establishments can be looked at from three points of view : (1) The distribution of factories according to workers engaged in each ; (2) the number of workers engaged in the different factories

* Statistical Year-Book of the League of Nations, 1933-34, Table No. 4. Comparison loses much of its value because the percentages are from different census years.

of different sizes ; (3) the share of factories of different sizes in the total industrial production. The following statistics show the importance of small industries from these points of view.

Distribution of Factories†

(1937)

Number of Operatives per unit	Percentage of total factories
Over 5 and less than 30	86.3
" 30 and " 100	10.1
Over 100	3.6

Distribution of Factories ‡
according to Workers.

(1932)

Establishments	Percentage of total Workers.
Employing 5 to 9 workers	13
10 to 49 "	26
50 to 500 "	36
Over 500 "	25

According to the above figures nearly 97 p.c. of the factories are small or medium-sized. Further nearly 39% of the workers are engaged in the small factories by regarding establishments employing less than 50 workers as small units, 36% are engaged in the medium-sized factories if those establishments which engage between 50 to 500 workers are regarded as such and only 25% of the workers are employed in the large scale factories. The share of these groups in the total production is as follows :

Small factories	29%
Medium-sized factories	35%
Large scale factories	25%

† Indo-Japanese Business Directory, 1939-40 p. 101.

‡ Guenther Stein, Made In Japan, pp. 45-46.

Thus nearly 64% of the industrial production comes from the small and medium-sized industries. These are the industrial units the statistics of which are included in the factory statistics. But below the small industries there are a number of very small establishments employing less than 5 workers to which the Factory Act does not apply. A very large number of independent producers are engaged in them and their production may be estimated at 11% of the total. They produce a variety of goods not only for home consumption but also for export. According to the Chamber of Commerce of Tokyo in 1931 they produced 18.8% of the cotton textile output ; 28.8% of the woollen goods ; 55% of the silk textiles ; 27.4 of the knitted goods ; 29.1 of hats ; 60.8% of pottery ; 65.5% of bicycles (not only parts but assembling also). Taking, therefore, all small and medium-sized industries, they produce about 75% of the total industrial goods.

Japan, therefore, is still substantially the country of small industry. One of the reasons which accounts for the predominance of these industries is the chronic depression and a state of overpopulation in the rural areas. The peasants who find it difficult to make both ends meet usually send their daughters to be employed in the textile factories or small business units. The employers in small establishments know that they can take the maximum work from them so long as they can avoid coming within the purview of the Factory Act. In Japan the Factory Act does not apply to establishments employing less than 10 workers, though statistics about those which employ between 5 to 10 workers are collected by the Factory Department. The second factor which facilitates production in small units is the abundance and cheapness of electricity. One of the reasons why industries in the past concentrated in certain localities in other countries

was the nearness to the source of power. In Japan electricity is available in small villages and, therefore, a small capitalist can establish his plant there and work it profitably. The third factor which helps them is the presence of adequate and efficient transport facilities which make the movement of raw materials and finished goods very easy. There is no need for an industry to establish at a particular place because of the transport facilities. The fourth factor is that these industries are in a position to manufacture a variety of goods to satisfy diverse tastes. The fifth factor is that in these establishments the overhead expenses are very low. The sixth factor is that many of these small establishments work in co-operation with big establishments in cities. Thus iron tubes and joints are manufactured in large factories while parts of machinery are produced at foundries run on small scale because of the difference in costs. Lastly very many small establishments are maintained by merchant employers who supply raw materials to artisans and pay them wages for manufacturing them into finished goods.

Another characteristic of the Japanese industrial structure is the dominance of a few families, some of which owe their lineage to former feudal lords, in the ownership of industries. Among these the leading ones are Mitsui, Mitsubishi, Sumitomo and Yasuda. Mitsui owns about 20% of the entire share capital of the country ; and Mitsubishi about 16%. They control industries, banks, insurance and shipping companies. Thus they are in a position to exploit small enterprises because of their control over raw materials and finance. "Japan then to-day is", says Utley, "in the grip of an oligarchy just as much as in the days of Meiji, but today's oligarchy is the child of the marriage of the feudal and capitalist elements, of the 'clan' oligarchs with the oligarchs of finance and

industry".* This concentration of capital in a few hands gives Japan an advantage in exporting goods, in buying raw materials and in general in the foreign trade of the country. But this very concentration is an obstacle in the way of the complete industrialisation of the country on modern lines because any attempt on their part to oust the petty manufacturers would recoil on them. It may give rise to a revolution against monopoly capital.

In recent years the composition of the Japanese industry has shown a remarkable change. The nature of industrial growth in the decade following the end of the war is shown by the number of workers engaged in the different industries as estimated by the Census of 1930 :

Percentages of Total Numbers
Engaged in Mining and
Manufacturing

Mining and quarrying	5.2
Kiln products	2.8
Metal	6.3
Machinery and tool	3.9
Shipbuilding and vehicle	3.1
Watch, scientific instruments, etc.,	.9
Chemical	2.1
Textile	24.2
Clothing	7.8
Paper and printing	4.5
Wood, bamboo and grass	10.6
Food and drink	8.1
Civil engineering and building	15.7
Public utilities	2.1
Others	2.1
	100.0

* Freda Utley, *Japan's Feet of Clay*, p. 244.

The above table shows that the textile and clothing industry was the most prominent one and gave employment to nearly one-third of the total workers. On the other hand the mining and metallurgical industries occupied a minor position. The factory statistics issued by the Ministry of Commerce and Industry in 1929 support the same conclusions. These statistics, however, do not take into consideration small establishments employing less than 5 workers. According to them 50% of factory workers were employed in the textile group. About 20% and 6% were engaged in the metal, engineering and tool making trades and chemical industry. The predominance of the textile industry has made industrial development lop-sided. By 1936 the percentages of employment in the three industries, textile (without clothing), metal, engineering and tool, and, chemical industries, were 40%, 27% and 10%. Thus while there was a fall in the textile industry there was a rapid rise in the other two. There were also changes in employment in the constituent industries of the textile group. The percentage of employment of workers in the cotton and silk spinning and weaving to total textile workers remained steady but there was a decline in those engaged in the silk reeling industry. Its proportion of textile employment fell from 42% to 28%. On the other hand, the proportion of textile employment in the rayon weaving, knitted goods, and woollen industries increased from 9 to 19. These few changes are enough to show that the industrial trend after 1929 was towards broadening the base of industrial structure

which previously solely depended on one or two chief industries. This change was caused by the recent expenditure on armaments and the difficulties encountered in the international markets for the sale of silk and cotton goods.

In spite of these recent changes in the industrial structure, light industries still occupy a preponderent position in it. Though Japan has made an attempt to develop her heavy industries, particularly in recent years, their production is small compared with other countries. Thus in 1929 the gross value of the goods produced by the Japanese machinery and engineering industry was £ 68 millions ; in the same year the value of production of the English industry was estimated at £ 472 millions. No doubt since then, as the above figures of employment show, the industry has been expanded, and yet she is still dependent on foreign countries for the supply of machinery which is a weakness of her industrial structure. In any highly industrialised nation, the employment in heavy industry would outweigh the employment in light industries. The following figures show the share of different industries in the total value of factory production. It should be, however, noted that they do not include the production of factories employing less than five workers. Their production is considerable and, therefore, if it is added to the production of light industries, the minor place which heavy industries occupy in the Japanese industrial structure would be more clearly brought out.

Percentage Share of Each Industry in the Total
Value of Factory Production.*

	1929 Percentage of Total	1933 Percentage of Total
1 Metals	8.9	11.7
2 Machine and tools	8.8	10.7
3 Chemicals	13.9	17.2
	—	—
Total of 1 to 3	31.6	39.6
	—	—
4 Textiles	38.8	35.6
5 Foodstuffs	14.5	13.5
	—	—
Total of 4-5	53.3	49.1
	—	—
6 Ceramics	2.8	2.8
7 Lumber & wood work	2.5	2.4
8 Printing	2.3	2.2
9 Gas and Electricity	0.6	—
10 Bleaching, Dyeing etc.,	3.9	—
11 Miscellaneous	3.0	3.7
	—	—
100	100	100

Industrial Policy

The state has played a vital part in the industrial development of Japan. There are three distinct phases of its relations to industry. In the beginning the state played the role of an entrepreneur and started industries on its own account and supervised them. Experimental factories for the manufacture of silk, cotton and woollen yarn and tissues, chemicals and glass were established by it. It also helped industrial activity undertaken by private enterprise.

*See Freda Utley, Japan's Feet of Clay, p. 82.

In course of time, however, these industries were transferred to private enterprises initiated by a few families and supported by government patronage. A reference to the circumstances which led to the adoption of this policy by the government has been made in the foregoing paragraphs and, therefore, what needs only to be mentioned here is that this phase of government policy came to an end with the end of the Sino-Japanese War because the progress made by industries till then was sufficient to attract private initiative. Government, however, has not completely withdrawn from ownership of industrial concerns and even to this day it retains its interest in the mining and heavy industries.

The second phase of its policy began after the Sino-Japanese war. It began to play the role of an industrial financier and also helped industries in many indirect ways. Through its control over banking, tariff and taxation policies, it directed the resources of the nation in the desired channels. It also gave subsidies to many industries the rapid development of which was essential in the interests of the nation. Thus through the Industrial Bank of Japan government arranged for necessary finance to old and new industries. It also taxed the capital goods industries lightly to encourage their development. After 1899 when the revision of commercial treaties signed in 1858 was complete, it gave protection to those industries which were threatened by foreign competition. But by far the most important aspect of its help was the subsidies it gave. As an example, the case of the shipbuilding industry may be cited. In 1896 the government enacted the Shipbuilding Encouragement Act and gave bounties on the construction of ships. After the industry had sufficiently developed, in 1909 the Ocean Service Subvention Act was passed and the government gave subsidies to shipping lines. The

size of subsidies given could be realised from the fact that of the total earnings of shipping companies between 1902 and 1926 amounting to 693,000,000 yen, nearly 207,000,000 yen were contributed by subsidies, i.e., about 30%. If, however, the abnormal earnings of the war period (1915-20) are left out, then the actual earnings of the companies were only 114,000,000 yen and the subsidies given by the government amounted to 167,000,000 yen. This is one instance from among a large number of industries which received subsidies. Government could undertake this financial burden because the amount of its public debt was still small. The policy of giving subsidies forms even to-day a part of the general industrial policy. The following are a few instances of subsidies given in recent years for the development of key industries and transport.

	(In yen)			
	1931-32	1932-33	1933-34	1934-35
	Actual figures	Actual figures	Budget estimates	Budget estimates
Assistance for the exploitation of petroleum resources in North Karafuto	100,000	284,000	1,216,000	1,200,000
Assistance to low temperature carbonization industry	...	...	296,200	252,000
Bounties for the manufacture of dyestuffs	591,560	63,061	...	...
Bounties for the manufacture of artificial indigo	...	1,101,917	45,182	...
Bounties for the manufacture of soda ash	303,902	...	...	...
Aid for the manufacture of steel rods	...	...	75,395	63,559

	(In yen)			
	1931-32	1932-33	1933-34	1934-35
	Actual figures	Actual figures	Budget estimates	Budget estimates
Assistance to the photographic industry	...	...	400,000	400,000
Bounties for the manufacture of motor cars	...	...	130,000	...
Aid to industrial research institutions	62,000	211,000	180,000	150,000
Subsidy granted by the Ocean Shipping Subsidy Law of 1909	6,562,448	6,538,394	6,199,680	5,961,737
Other shipping subsidies	3,907,387	3,836,828	3,796,084	3,721,084
Air transport subsidies	2,374,949	1,364,886	1,260,000	1,010,283
Subsidies for ship improvements	1,250,000	3,608,204	4,250,000	65,000

In the post-war years the government was faced with an altogether novel situation. During the war and the post-war inflation period industries had developed very rapidly and their capacity was far in excess of the available markets. Over-production therefore threatened a crisis. Government which had hitherto helped the progress indirectly had to revise its policy in the direction of direct intervention. It was no doubt inspired by a pure desire to bring about a reorganization of industries. The first step in this direction was taken in 1925 when the Export Industries Association Law was passed. It was intended to centralise control in the export industries, particularly the small and medium-sized ones by forming associations to control equipment, production and sales. It was expected that these associations would bring about improvement in small industries. Government expected that large industries would come to voluntary agreement among themselves in their own interest and

check overproduction and internal competition. But so long as inflation was raising prices industries had no desire to combine and undertake rationalization measures. Imagining, therefore, that the root cause of all trouble was inflation, next year government resorted to deflation which brought about a sharp crisis in 1927. Instead of improving, the situation worsened. No doubt in the next two years industries were driven into cartel agreements but before there could be any substantial improvement the crisis of 1929 again affected them adversely. In such conditions the industrialists looked to the government for help. In June, 1930 it established the Industrial Bureau of Rationalization to study and enquire into all important matters relating to the rationalization of industry and other measures to promote industry in general. This body consists of different committees looking after several problems of industries. It succeeded in bringing about centralised control over small and medium-sized industries by forming national federations. In the major industries, however, it met with a different situation. In a large number of industries still no cartels were formed; in others where cartels existed, the agreements which were voluntary were violated by members. The export Industries Association Law of 1925, which was originally intended for small industries, was therefore amended in July, 1931 and was made applicable to large industries. The amended law was called the Industrial Association Law. It also failed to bring about necessary agreement among industrialists for checking internal competition and for rationalization. In August, 1931, therefore, the Staple Industries Control Act was passed and its administration was left to the Bureau. Its object was to bring about cartel agreements among industries so as to control production and prices. The government was also empowered to impose a cartel

agreement on dissentient units if two-thirds of the members of a cartel made an application to that effect. The government could also make changes in cartel agreement if such changes were found necessary in the national interests. Among the recent legislation this is the most comprehensive law which gives power to the government to intervene in industries. After it was passed, the law was applied to nearly twenty-two industries.

When the law was passed it was not thought that it would become an instrument in the hands of the government for detailed intervention. So long as the influence of business men on the government was sufficiently great, there was little opposition to its policy. But gradually the influence of the Army and Navy on the government increased and they desired to banish all liberal tendencies in economic activity and to organize the economy of the country on a quasi-war-time basis (*Junsenji Keizai*). For this purpose the Staple Industries Control Act proved useful and governmental intervention in industry rapidly increased. The old family groups (*Zaibatsu*) resented this intervention of the government but there was another group of industrialists (*New Zaibatsu*) interested in war industries which supported the government policy and encouraged it to go ahead with it. In 1934 a law was also passed for the establishment of the Japan Iron Manufacturing Company to take over six private concerns and the state's *Yawata* Works. Eighty-three per cent. of its capital is held by the government and the company controls 80% of pig iron and 50% of steel production of the country. By the Petroleum Industry Law of 1934, the government brought under its control the petroleum industry and trade. Foreign companies engaged in this trade were required to hold certain stocks in the country. In 1936 the government assumed control over ship-

ping under the Shipping Route Control Law. The policy of the government was clear. It was to prepare the country for war. Thus in recent years industries have been subjected to a strict governmental control though not without opposition.

The Cotton Textile Industry

The cotton textile industry is the leading industry of Japan. Cotton textile exports account for nearly one-fourth of the total exports. Japan is the second largest consumer of cotton in the world and comes next to U. S. A. It has a special interest to the Indian reader because of its competition with the equally great cotton textile industry of India. A discussion of the growth of this industry in more details would not, therefore, be out of place.

The hand-spinning and hand-weaving industry existed in Japan for hundreds of years before the Meiji Restoration. But it was in the primitive stage. Western machinery was first introduced for spinning in 1859 by Prince Shimazu of Satsuma. A spinning mill with 3,600 spindles started working in 1863. Very soon another mill with 2,000 spindles was established by him which actually started working in 1870. Thus the modern industry had already appeared in Japan before the Meiji Restoration.

After the Meiji Restoration the progress of the industry was steady and continuous. There are four well-marked periods in this progress : (1) 1868 to 1885, the period of experiments in which the mills were generally of small size and mostly run by the government or with its aid ; (2) 1885 to 1893 were years of economic consolidation in which the currency was stabilised and banking was developed ; the spinning mills were transferred to private enterprise and the industry was able to export on a small scale but its importance from this point of view was not great ;

it was not even able to supply the entire home market ; (3) 1894 to 1914 was a period of quick development ; the two wars—the Sino-Japanese and the Russo-Japanese—gave a stimulus to the growth of the industry ; duties on imported cotton and exported cotton yarn were removed and Japan emerged as an exporter of cotton yarn and tissues to the Eastern markets ; the expansion of the industry was made possible because of the readiness of foreigners to lend capital to Japan ; (4) 1914 onwards has been a period of phenomenal progress with occasional setbacks as in the years of post-war depression and the first two years of the great depression of 1929. The initial impetus to this progress was supplied by the last war when Japan was in a position to exploit the Eastern markets ; the second wave of progress started after Japan left the gold standard in December, 1931 and continued right upto the beginning of the second Sino-Japanese war. The following table will show the progress of the mill industry from period to period :

Number of Mills, Spindles and Output

Year	Number of Spinning and Weaving Mills	Number of Spindles (In millions)	Number of Looms (1000)	Output of Yarn (Bales) (In millions)	Cotton Cloth (In million yards)
1845	20	.6	—	—	—
1893	40	.4	—	—	—
1908	51	1.3	11	.8	147.4
1913	152	2.4	26	1.5	416.7
1923	241	4.4	61	2.1	1000.0
1930	263	7.2	79	2.5	1388.4
1934	275	9.5	91*	3.4	1793.8

* These are the looms owned by the spinning companies. They constitute only 25% of the total looms. According to the Ministry of Commerce and Industry, the cotton textile industry employed in 1934 a total of 376,704 looms. The great bulk of looms are employed by small factories with less than 10 looms each.

The above table shows that the progress of the industry was rapid after the Russo-Japanese War and the Great War. But here is a distinct difference in the trends of development in these two periods. Between 1908 and 1913 while the number of mills increased three times the spindles and looms increased by only two times. In the next period while the number of mills increased by 80 per cent. the increase in spindles and looms was nearly 40 per cent. and 350 per cent. respectively. Thus the tendency before the war was for the multiplication of small mills ; in the post-war period the average unit was larger. The post-war tendency is explained by the fact that in recent years Japan has been required to cut down her costs of production and one way of doing it is by increasing the unit to a size which gives progressively decreasing costs of production.

Another aspect of the development is the financial position of the mills. The spinning side of the industry is highly concentrated in the hands of a few big firms which are united together in an effective cartel, the Japan Cotton Spinners' Association. In weaving, however, there are a large number of small factories and a few big ones joined to the spinning mills. The latter are under the control of the Japan Cotton Spinners' Association ; the former are under the control of the Japan Federation of Export Cotton Tissue Trade Associations and the Japan Federation of Cotton Tissue Manufacturers' Associations. This latter body has a larger control over the small and medium-sized factories. In the spinning branch about ten companies control about 85 per cent. of spindles and 88 per cent. of yarn output. It is possible, therefore, to show the financial success of these ten companies.

Capital and Profits of the Cotton Companies*

(Leading Ten Cotton Companies)
(In million yen)

	1913	1923	1933	1934
Paid-up Capital	162.3	319.0	237.5	256.7
Reserve fund	139.0	217.2	218.7	229.1
Net profits	128.6	60.2	70.9	82.2
Amount of dividends	76.8	59.4	43.8	41.5
Average rate of dividends	51%	19%	48%	50.7%

The above table shows that the average capital of the cotton companies increased from 16.2 million yen in 1913 to 31.9 million yen in 1923 because of the extensions undertaken during the war. It declined thereafter to an average of 23.7 million yen by 1930 as in this period the capital was reduced because of the losses suffered during the years of depression. The average again shows a rise to 25.6 million yen in 1934 and indicates the expenditure undertaken on rationalization. Another feature brought out by the above table is the sound policy of building up reserves. During the years 1923-1930 however the amount of reserves remained steady. In these years, therefore, they reorganized their plants by expenditure from current profits. Further to-day the reserves amount to nearly the same amount as the paid-up capital. The industry, therefore, is well provided against contingencies. Lastly, the companies have been able to pay handsome dividends and maintain them except in the years of post-war depression. On the whole the position of these companies is financially sound.

The cotton industry has made such a rapid progress that it has ousted England from her former markets and bids fair to occupy the premier position

* Uyehara, the Industry and Trade of Japan, p. 82. :

in the international trade in cotton textiles. It is these exports that have shaken the Western industrial nations and created panic among them about Japanese competition. The nature and the size of exports is shown by the following figures.

Exports of Cotton Yarn and Cloth

(In million yen)

	Yarn	Cloth	Total	Percentage of Total Exports
1913	70.9	33.6	104.5	16.5
1923	78.5	234.7	313.2	19.1
1930	15.0	272.1	287.1	19.4
1931	8.5	198.7	207.2	18.6
1932	21.5	288.7	310.2	22.0
1933	15.7	283.2	398.9	21.4
1934	23.4	492.3	515.7	23.7

The first point that is striking about the above figures is the decline in the importance of cotton yarn exports and the increase in that of exports of cloth. It is a characteristic common to all the countries which have developed the cotton textile industry that in the beginning exports of yarn predominate over those of cloth but gradually they are replaced by the exports of the latter. The value of total cotton exports has been continuously increasing excepting in the first year of the last great depression. What is surprising, however, is that there has been a phenomenal growth in the exports in the last three years under review each breaking the previous record. This has been largely due to the rationalization of the industry undertaken in the previous years and partly to improved marketing and partly, of course, to the depreciation of yen.

It has been already said that the industry to-day occupies not only a pre-eminent position in Japan but also in the world. Though from the point of view

of spindles and looms other countries may be ahead of her, from the point of view of consumption of cotton which is the best criterion of judging the progress of a country, she ranks only second to the U. S. A. The following table shows the international position of the Japanese cotton textile industry.*

	(Jan. 31, 1936)				
	Ring spindles (1000)	Mule spindles (1000)	Total (1000)	Consumption of raw cotton (1000 bales)	Looms
Great Britain	11,045	31,262	42,307	2,604	560,153
U. S. A.	28,640	400	29,040	5,651	608,815
France	7,588	2,428	10,016	1,109	608,815
Germany	6,846	3,263	10,109	...	225,000
U. S. S. R.	7,613	2,187	9,800	2,155	259,000
British India	9,090	596	9,686	2,921	189,040
Japan	10,560	35	10,595	3,649	86,343
China	4,952	0	4,952	2,358	42,596
Total (including other countries)	108,025	45,021	153,046	24,715	2,991,177

The above figures show that even with a smaller equipment compared with that of Great Britain the consumption of cotton is larger. This is no doubt due to her superior equipment and methods of production. It is known that the bulk of Japanese looms are automatic and the bulk of her spindles are ring spindles. On the contrary in Great Britain the bulk of looms are ordinary and the bulk of spindles are mule spindles. Technically the equipment of the British industry is inferior. In India, however, the bulk of spindles are ring spindles but the bulk of looms are ordinary ones. Ring spindles and automatic looms give more efficient production than mule spindles and ordinary looms.

* Mitsubishi Economic Bureau, *Japanese Trade and Industry*,
p. 236.

How could Japan achieve this remarkable success in the cotton textile industry in so short a period? A simple answer to it will be that the success of Japan lies in her ability to sell cheaply at the root of which lie a high degree of integration of the industry and rationalization. The Japanese Cotton Spinners' Association controls nearly 97% of the total spindles and 50% of the total power looms. The same degree of concentration is neither found in England nor in India. In recent years the industry like others has been thoroughly rationalized by saving in costs on a number of operations. "... To-day in many fields the Japanese manufacturer produces a **better article than ever, and at a less cost**. By the second half of 1932 Japanese goods in great variety were flooding markets all over the world; and, though the fall in the exchange value of yen was in many cases the chief reason for this success, its **underlying cause is increased efficiency**."* This increase in efficiency was particularly great in the last decade. But analysing the causes into more details, the success of the industry must be attributed to three factors: (1) a favourable difference in the cost of production; (2) marketing facilities; and (3) technical skill.†

In the cotton textile industry the cost of production consists of (1) cost of labour, (2) cost of raw cotton, (3) cost of power and (4) other running expenses. Japan has no advantage over her competitors in respect of the second and third factors because her resources of both are meagre. She imports nearly all the cotton she requires from outside. Her power resources except electricity are known to be poor. From this it follows that all her advantages lie in the first, and the fourth factors. Her chief advantage,

* *Asahi, the Secret of Japan's Trade Expansion*, p. 19.

† *Uyehara, the Industry and Trade of Japan*, p. 86, et seq.

however, lies in the cheap labour cost. There are some reasons for this low cost of labour. Nearly 80 per cent. of the labour in the cotton industry is female labour between the ages of 14 and 18. These girls come from the peasant families in the countryside which find that their income is not sufficient to maintain all the members. Not burdened with family responsibilities, their low wages are adequate to maintain themselves. The money wages, however, form only a part of the advantages they get. Generally they are provided with all conveniences in the dormitory system; but for those who stay outside additional allowances are given. It is estimated that money wages form only 79 per cent. of the total payment; the remainder consists of welfare and relief.

Further recently the industry was rationalized and a number of processes were simplified or abolished.* The predominance of the ring spindle and the automatic loom also helps the worker to produce more efficiently. Consequently a girl spinner looks after 300 to 400 spindles and sometimes even 600 spindles. The introduction of automatic looms has greatly reduced the number of operatives in the weaving side. A Japanese girl can look after 30-40 automatic looms and 8 ordinary ones. It is said that even 60 looms can be looked after by a girl but at present this has not been found practicable.* As against this record, in India a male worker generally looks after 220 spindles and two looms. Recently, however, the Indian mills have also undertaken rationalization and some workers are known to be looking after more spindles and more looms.† But this tendency is not

* For details of technical changes, see Asahi, *The Secret of Japan's Trade Expansion*, pp. 29-31.

* Sir Lallubhai Samaldas, *My Impressions of Japan*, p. 62.

† Report of the Textile Labour Enquiry Committee (1940)

Vol. 11; p. 37.

still general. In addition there is one more factor favourable to Japan. The mills in Japan work two shifts of seventeen hours and the total working hours in a month are 510. In India until recently the double shift system was not tried and, therefore, the monthly hours worked were about 250. The following figures show how the efficiency of Japanese labour has affected its productivity :

Reduction in Working Hours and Increase in Annual
Per Head Production §

	Working hours per diem	Textile Industry Per head production (in 1000 yards)	Spinning Industry Per head production (in bales)
1922	11	18	12
1926	11	22	14
(a)	10		
1927	10	25	15
1930	10	39	18
(b)	8-30		
1931	8.30	49	20
• 1932	8.30	50	22

These figures prepared by the Social Bureau of the Department of Home Affairs clearly show that there was a remarkable increase in the efficiency of Japanese workers and this was responsible for the reduction in the manufacturing costs. An interesting comparison was made in an article published in the Indian Textile Journal (July, 1933) by T. Sasakura, Managing Director, the Toyo Poddar Cotton Mills, Ltd., between the spinning and weaving charges in India and Japan when the competition of the latter

§ Asahi, The Secret of Japan's Trade Expansion, p. 26; (a) & (b) indicate reductions in working hours.

with the former was most serious in 1933. The following tables will show the difference in the weaving and spinning costs between the two countries and the number of workers required in the weaving side:

Spinning Charges per Spindle per Day
(In pies: exchange rate 100 yen=83 Rupees)

	Bombay average mills	Upcountry mills	Japanese mills	Bombay Rationalized mills
Wages	5.04	3.86	1.57	4.25
Power	1.87	2.25	1.09	1.30
Store	1.16	1.29	0.44	0.75
Miscellaneous	1.90	2.56	1.28	0.55
Total	9.97	9.96	4.38	6.85

Weaving Charges per 100 Looms per Day
(In rupees: exchange 100 yen = 83 Rupees)

Wages	165	132	43	111
Power	34	29	6	15
Store	36	39	18	45
Miscellaneous	29	45	27	11
	264	245	94	182

Mill Hands employed per 100 Looms

	Japanese Rationalized Mills	Bombay Rationalized Mills
1930	26	94
1931	22	89
1932	20	88
1933	18	61

The above figures calculated by one who is conversant with the working of mills in India and Japan show the vast difference in the manufacturing costs between the two countries. The most striking feature of the difference between the two industries is the comparatively low cost of labour in the total cost in Japan. The advantage which Japan enjoys in other respects is not very great. The third table also brings

out how the automatic loom makes a difference in the total number of workers required to look after 100 looms. The last Report of the Textile Labour Enquiry Committee writes that the Indian mills are rationalizing in recent times. If that is so the above figures show how much ground the Indian mills have still to cover.

A similar comparison between the total manufacturing costs for certain goods between the Japanese and Lancashire industries has been made by Mr. Barnard Ellinger whose findings are given below:*

Comparison of Japanese and Lancashire Costs

	Dragon C		Soldier		2 Geese		Tiger in Bamboo	
	(Pence per piece)							
	U.K.	Japan	U.K.	Japan	U.K.	Japan	U.K.	Japan
Raw cotton	63.5	63.5	72.0	72.0	56.0	56.0	42.5	42.5
Labour cost	27.9	9.0	35.2	14.4	25.5	9.2	23.0	9.8
Other costs	25.0	22.5	29.2	26.7	25.5	21.8	19.9	18.9
Total	116.4	95.9	136.4	113.1	107.0	87.0	85.3	71.1
Per cent of of Japanese cost			121.4		120.6		123.0	120.2

The above table again remarkably brings out the same fact that the chief advantage enjoyed by Japan is in respect of labour costs.

In the marketing of cotton goods the position of the industry is again superior to its competitors. The centralised control over the industry in its spinning and weaving branches, facilitates an efficient marketing of goods in foreign countries. Thus the Japanese Cotton Spinners' Association has played a very great part in the commercial treaties that have been concluded with foreign countries. On the other hand the

* Hubbard, *Eastern Industrialisation and Its effect on the West*, p. 124.

Japan Federation of Cotton Tissue Manufacturers' Associations and the Japan Federation of Export Cotton Tissue Trade Associations generally supervise production and marketing of textiles. No goods are allowed to be exported unless they conform to given standards. In addition her banks and shipping companies give the industry all the facilities necessary for undertaking exports even to distant lands. The latter being subsidised offers usually cheap freights. The consular service of Japan is also very efficient and supplies information to the industry about style, quality and price of goods likely to appeal to the people of different countries.

As regards the technical aspect of the industry, it may be said that generally the manufacturer's attitude has been to keep the industry up-to-date. Hence new inventions constantly replace old plant which has become obsolete. They have also paid great attention to industrial research without which in this age of competition no industry can hope to enjoy growing prosperity. The invention of the automatic loom is a Japanese achievement and its importance can be realised from the fact that the patent rights were purchased by Platt Brothers for one million yen.* The effect of technical improvements has been reflected in the consumption of cotton. In 1933 while the per spindle consumption of cotton in Lancashire was 26.9 lbs., in Japan it was 174.4 lbs. An allowance, however, must be made for the idle spindles and shorter hours of working in Lancashire.

To return again to the point of comparison between India and Japan, after taking into consideration all costs upto landing goods in India including the highest import duty of 75% levied here on the Japanese imports in 1933, the final price roughly works out

* Sir Lalubhai Samaldas, *My Impressions of Japan*, pp. 62-63.

as follows :*

	Bombay Cloth	Japanese Cloth
Raw cotton	43%	39.81%
Spinning	22%	11.00%
Weaving	35%	11.66%
	100%	62.47%
Freight etc. @ 5%	—	3.59%
Duty @ 75%	—	49.19%
		114.78%

Thus the heavy import duty counterbalanced the difference in the costs of manufacture in the two countries and gave an advantage to Bombay mills of only 14.78%. But it was not expected that this heavy import duty would be continued for long to the detriment of the consumer. The alternative for the Indian mills was to take in hand rationalization measures and reduce the costs of manufacture. One sees no reason why the government should not make it a condition of protection that the Indian mills must undertake measures for increasing efficiency. So long as the Indian market is reserved, the Indian manufacturers will have no incentive to rationalize. Even after crores of rupees are transferred from the consumers' pockets to those of the manufacturers the industry will have made no progress. This state of affairs requires to be remedied. And if the Government of India makes a departure from its traditional policy, it will not be novel. When the Iron and Steel industry was given protection in England in 1932, one of its conditions was that the industry would forthwith take measures for rationalization. The Indian government and cotton manufacturers have a great lesson to learn from Japan.

* The Indian Textile Journal, July, 1933.

There are however two great problems that face the Japanese cotton industry as regards the future. Firstly, the Japanese textile goods like others are being penalised in foreign countries by the increase in import duties. The Japanese government, however, is trying its best to open alternative markets by attempts to enter into commercial agreements. Secondly, the industry is too much dependent on foreign countries for supplies of raw cotton. This question of raw cotton is also being tackled by encouraging its cultivation in the colonies, particularly Chosen and Manchuria. It is proposed to extend cultivation of cotton by 500,000 cho and 300,000 cho over a period of 20 years in these two countries respectively.

Chapter XXIV

RAILWAYS, SHIPPING & FOREIGN TRADE

Railways

Before the Meiji Restoration the means of transport in Japan were very backward. The principal modes of transport were the sedan chair, the pack horse and the man-drawn cart. Heavy goods were generally carried in ships along the coast. Hence the towns along the coast were more developed than the interior places. There was not a single mile of railway in Japan. The Meiji government realised that from the political, economic and military point of view the improvement of transport required immediate and urgent attention. To make the authority of the central government effective in distant regions, to improve the economic organization of the country and to defend Japan against foreign aggression, it was necessary to build railways immediately.

The government decided to build a railway line connecting the most important cities of Tokyo, Yoko-

hama, Osaka, Kobe and Kyoto. But private capital was not ready to undertake the enterprise. It was, therefore, necessary for the government to undertake the work itself, but it did not possess the necessary capital. Through the good offices of an Englishman the government arranged for a loan of one million pounds in London. The services of English technicians were also used in the construction of the early lines. In 1872 the first railway line of 28.9 kilometers was opened for traffic between Tokyo and Yokohama. It was followed in 1874 by the Osaka-Kobe line of 32.1 kilometers which was extended to Kyoto in 1877. These lines were the nucleus of the present Tokaido line running between Tokyo and Kobe, via Kyoto and Osaka covering a distance of 611.4 kilometers. In 1878 the government again made an attempt to interest private enterprise in railway construction but failed. It continued, therefore, the work of construction from the loan it raised in the country. But after this loan was exhausted, again an attempt was made to encourage private railways; this time it succeeded and in 1881 the Nihon Railway Company was organized as a joint stock company with a capital of 20,000,000 yen. The government aided this Company with land and a guarantee of interest of 8% on capital for varying periods. In return the government obtained a control over the management of the company. The government also had the option of purchasing the lines at the end of a specified period.

The Nihon Railway Company worked very successfully and, therefore, set an example, for the shy private capital to come out. In the next ten years, 15 more companies were started and the guarantee of interest given to them ranged from 4 to 8 per cent. Until 1906 the new additions were mainly undertaken by private enterprise. At the end of 1905 the operating length of government and private lines

was 2,413 and 5,232 kilometers respectively. Thus nearly two-thirds of the railway mileage belonged to private companies.

But the rapid expansion of railways had led to many defects. There was no planning of railway lines and many uneconomic lines were built. In the end they came into financial difficulties. There was also no uniformity in services. All these defects were magnified during the Russo-Japanese war. In 1906, therefore, with the approval of the Diet, the government purchased 17 private lines totalling 4,547 kilometers. The purchase price was fixed at twenty times the average profit during the previous six half-yearly periods. The funds necessary for the purchase were raised by the issue of domestic bonds. Since 1906 the main railway system of Japan is under the control of the state. It has been able to improve the service, construct railway lines which would not be built by private enterprise and reduce passenger fares and goods rates. The total capital of the state railways in 1934 was 3,800 million yen. The net return on this capital has been about 5%. It was, however, lower during the years of the depression of 1929-33. The following figures show the return on capital in recent years :

(Per cent.)

1928	9.3	1932	3.5
1929	7.5	1933	4.9
1930	4.6	1934	5.3
1931	4.1		

Though the government took over the main railway system in 1906 and continued to construct the trunk and strategic lines, the construction of feeder lines was left to private companies. For some years

after 1906 private enterprise was discouraged, but from 1912 the government offered subsidies on private construction. Thus private companies constructing local lines were offered an annual subsidy equal to five-hundredth part of the expenses of construction for a period of ten years. Private companies took advantage of this facility and in 1916, 59 companies received subsidies amounting to 947,000 yen; in 1930, 102 companies received a subsidy of 7,500,000 yen; and in 1934, 107 companies received a subsidy of 7,000,000 yen. In 1921 the government also passed a law to render construction of railway lines by private companies easy. In 1933 there were 357 private companies owning mainly feeder lines. Their total capital was about 1,360 million yen. Thus to-day the trunk lines are owned by the government and the feeder lines by the private companies. The following statistics show the growth of railways in Japan from period to period:

	State Railways	Local Railways
1873-74	29	—
1902-03	1,710	4,845
1907-08	7,152	717
1912-13	8,396	1,289
1924-25	12,612	4,596
1935-36	17,030	7,097

An interesting feature of the Japanese railways is that unlike many other countries the receipts from passenger traffic are larger than those from goods traffic. This is partly due to the fact that coastal shipping plays a large part in the movement of goods. This is possible in the case of Japan because she possesses adequate shipping and good harbours. It is also partly accounted for by the poor raw material and mineral resources of Japan. The most important goods transported by rail are coal, timber, rice and other cereals, gravel, manure and mineral products.

The following statistics show the income of railways from the two sources in recent years :*

Revenue of State and Local Railways.

	Passenger (In million yen)	Goods
1923-24	287.7	196.9
1924-25	301.4	217.3
1925-26	308.0	223.3
1926-27	315.5	243.7
1927-28	327.5	242.2
1928-29	346.9	250.8
1929-30	348.8	246.7
1930-31	322.4	208.9
1931-32	304.1	198.3
1932-33	296.0	196.6

The above table clearly shows that the receipts from passenger traffic have been larger than those from goods traffic. It also shows that the depression of 1930 affected the railway traffic and income on both accounts showed a considerable decline. The position of railways, however, improved after 1933 with the rapid growth of business in subsequent years. This revival is also reflected in the improvement of return on capital on the state railways given above.

Shipping

For nearly two hundred years before the Meiji Restoration the building of ships of over 100 tons was prohibited so that the Japanese sailors might not have contact with foreign countries. They had, therefore, very little knowledge of the construction of modern ships or the art of navigation. But with the visits of foreigners to Japan in the middle of the nineteenth century, the weakness of the country in sea power was made manifest. Between 1845 and 1853,

* Financial and Economic Annual of Japan (1934) p. 212.

therefore, the Lord of Satsuma secretly constructed vessels of modern type in his territory. When Commodore Perry paid a visit in 1853, the Shogun also realised the need for removing the restriction on the construction of larger vessels for the purposes of the defence of the country. In 1853, therefore, the restrictions placed in the seventeenth century were removed and thus permission was given to construct ships of a larger size. The Shogun himself encouraged the building of modern vessels. Between 1854 and 1859 the Shogunate constructed a shipyard and started a navigation school at Akkura in the Nagasaki prefecture. Twenty-two Dutchmen were employed as teachers. The construction of another shipyard was started at Yokosuke near the entrance to Tokyo. Thus before the Meiji Restoration, a beginning was made in the establishment of a shipbuilding industry, but its real development started after 1868.

The Meiji government realised the importance of developing the shipbuilding industry and the mercantile marine for the defence and foreign trade of the country. It continued the policy of constructing shipyards. The construction of a shipyard begun at Yokosuke by the Shogun government was completed in 1874 and in the same year the construction of another shipyard at Nagasaki was begun. The ships constructed in these shipyards in the early years were usually small. There was also dearth of technicians and materials and the knowledge of construction was still in its infancy. The Japanese mercantile marine, therefore, had to depend on the purchase of foreign vessels. The first large steamer constructed in 1898 was of 6000 tons only. In view of this slow progress and the need for larger and more vessels felt during the Sino-Japanese war, in 1896 the government passed the Shipbuilding Encouragement Law which provided for the payment of a bounty on iron and steel.

vessels of more than 700 gross tons constructed in the Japanese shipyards. In addition to this direct aid, the encouragement given to the Japanese mercantile marine had an indirect effect on the industry. Consequently to-day there are about 300 shipyards in Japan. Of these 7 or 8 are capable of constructing large modern ships.

The mercantile marine of Japan which to-day occupies the third place among the countries of the world was no doubt encouraged by the government, but wars and the growth of Japan's foreign trade have played not an inconspicuous part in its development. The shipping policy of the government which has played a direct part in its development has passed through three phases: (1) 1868-95, the period of inception; (2) 1896-1909, the period of general assistance; and (3) 1909 to the present time, the period of subsidization of important shipping services and the plans for the improvement of the quality of the mercantile marine.

The first act of the Meiji government in the direction of encouraging the growth of merchantile marine was the passing of the Mercantile Marine Law in 1870. The first shipping company that was organised under it and partly managed by the government was the Kaiso Kaisha registered in 1870. Two years later the company was subsidized by the government and was named the Nipponkoku Yubin Kisen Kaisha. Very soon a number of companies were started among which the most important one to be organised was the Mitsubishi Kisen Kaisha which was given a subsidy from September 15, 1875. This company remained outstanding until in 1883 three small companies were amalgamated under the control of the government to break the monopoly of the Mitsubishi company. The amalgamated company was called the Kiodo Unyu Kaisha. It started with a capital of 1 million yen of which 2 million yen were contributed.

by the government. Next year the Osaka Shosen Kaisha was organized by many shipowners of Osaka. In 1885 the Mitsubishi Kaisha and the Kiodo Unyu Kaisha which were competing with each other very severely were finally amalgamated as the Nippon Yusen Kaisha (the Japanese Mail Steamship Company). It is the largest shipping company of Japan to-day. It started with a capital of 11 million yen. It was given a subsidy of 880,000 yen per year until 1900. Until this company was formed, the smaller shipping companies generally plied between Japan, China and Korea. But this company ventured upon longer voyages and its first long route was to Bombay. During the Sino-Japanese war the existing shipping was found to be inadequate and, therefore, was supplemented by purchase of foreign vessels. In 1895 Japan possessed 147 steamships with a total tonnage of 164,454.

From the experience of the Sino-Japanese war the government decided to encourage directly the shipbuilding industry and the mercantile marine. In 1896 the government passed two laws, the Shipbuilding Encouragement Law already mentioned and the Shipping Subsidy Law. According to the provisions of the second law, the government offered a subsidy to every Japanese shipowner of steel vessels of not less than 1000 tons. Encouraged by this law a number of shipping companies started to open lines to various Western and Eastern countries. The shipbuilding industry was also greatly stimulated. Like the Sino-Japanese war, the Russo-Japanese war also gave a fillip to shipping development and in 1906 Japan possessed 2,003 steamships with a total tonnage of 1,16,945. The subsidy given by the government between 1896 and 1907 amounted to 17 million yen. This large subsidy and the two wars were no doubt responsible for the rapid growth of the mercantile

marine in the first decade after the introduction of the two laws in 1896.

As the burden of the general subsidy under the law of 1896 was found to be too heavy, in 1909 the Ocean Service Subvention Law was passed which limited the scope of subsidy. It restricted subsidy to steamships of more than 3,000 tons and less than fifteen years old which were plying on European, North American and Australian routes. This discrimination was partly meant to improve the quality of the Japanese shipping. On the eve of the Great War Japan had 3,286 steamships with a total tonnage of 1,528,000. During the war the Japanese shipping and foreign trade were stimulated because of the favourable position of Japan in the Eastern hemisphere. Her mercantile marine, therefore, established its hold on distant shipping lines. The Japanese ships visited nearly all countries in spite of the danger of enemy action. The shipbuilding industry at home was also stimulated because of the resulting prosperity of shipping. At the end of the war in 1918, Japan possessed 4,755 steamships with a total tonnage of 2,337,000.

During the postwar years, the Japanese shipping like that of other countries was faced with a depression. In spite of the total loss of 11.8 million tons of shipping, due to enemy action during the war, the replacements were quick being encouraged by governments. The total tonnage of the world in the immediate post-war years was very much bigger than before it. But the international trade of the world showed slow recovery. After the depression of 1929 it showed a more steep decline. The world shipping was, therefore, very much larger than required and every country was faced with the problem of idle tonnage. In Japan an attempt was made to reduce internal competition by bringing about agreement among competing companies regarding charges, but none of

the agreements succeeded and the idle tonnage of the country increased from 90,000 in 1923 to 182,000 in 1933. The quality of Japanese shipping also suffered in these years as many of the ships were more than 25 years old. The shipbuilding industry at home also suffered from a state of depression. In October, 1932, therefore, the government introduced a "scrap and build" plan. Accordingly old vessels of more than 1000 tons and of more than 25 years old were to be broken up and new modern vessels were to be constructed. The total tonnage of old vessels to be so broken up and of the new vessels to be constructed was to be 400,000 and 200,000 respectively. The plan was assisted by the government which offered a subsidy of 11 million yen spread over three years. The plan was successful as expected. By April, 1935 vessels of 399,240 tons were scrapped and new ships with an aggregate tonnage of 198,989 were constructed. In view of the success of this plan, in April, 1934 a second plan was announced to be completed in one year's time. The total tonnage of vessels to be built was to be 50,000. The total subsidy offered amounted to 1,500,000 yen. As the scrap and build plans were likely to lead to some unemployment of crews, to provide work for the Japanese sailors it was ordered by the government that crews of foreign nationality were not to be employed. The foregoing brief description of the growth of the Japanese shipping shows that it owes its present position to the encouragement given by the government. The following statistics show the progress of the Japanese shipping from time to time and its present position in the world :

Total Number and Tonnage of Japanese Vessels.
(At end of year)

	Number	Gross tons
1870	35	24,997
1887	252	107,808

	Number	Gross tons
1907	1,592	1,112,937
1914	2,331	1,853,425
1919	3,040	3,005,550
1931	3,726	4,331,685
1933	3,683	4,162,703
1935	4,036	4,169,72

Tonnage of the Principal Maritime Countries
(June 1935)

(1000 gross tons)

Great Britain including dominions	20,286	France	2,989
U. S. A.	12,145	Italy	2,838
Japan	4,086	Netherlands	2,544
Norway	3,967	Sweden	1,541
Germany	3,693	Total (incl. other countries)	63,727

The first table gives the progress of the Japanese shipping which includes the vessels belonging to her colonies. In the last year mentioned, Japan proper possessed 3,469 vessels with total gross tonnage of 3,863,041. The figures also refer to only steam and motor vessels. The number of sailing vessels in the last year mentioned was 16,668 of 951,981 gross tons. In recent years the progress of steam and motor vessels has been very rapid. The second table shows that Japan ranks third in the world, but there is a vast difference in the position of the first two countries and Japan. On the other hand her tonnage is very nearly equal to that of many other countries. But all the same her progress to the present position in spite of adverse factors, particularly lack of raw materials, must be regarded as praiseworthy. It indicates how a nation can overcome odds in its economic development provided there is a desire to achieve solid results.

Foreign Trade

The foreign trade of Japan like that of England is vital to her economy. The progress of industrializa-

tion depends on her ability to expand it. The modern industries that have recently developed in Japan depend on foreign trade either for the supply of raw materials or for markets for their manufactured goods or both. The importance of foreign trade from the point of raw material supplies can be seen from the dependence of her industries on foreign sources. According to the factory statistics of the Department of Commerce for 1932 the total of raw material consumption in industrial production was valued at 3,414,000,000 yen ; of this nearly 1,040,000,000 yen worth of raw materials or semi-manufactured goods meant for further manufacture were imported from foreign countries, i.e., about 30% of the total consumption. Thus she is dependent on foreign countries for the supply of vital raw materials she does not possess. Her weakness in this respect would become more clear from the position of some of her industries. The cotton spinning industry imports nearly all its raw materials from outside ; and the woollen industry imports nearly 75%. The iron and steel industry, one of the vital basic industries, imports over 90% of iron ore and 50% of pig iron. Her engineering industry also imports large quantities of machine tools which she cannot manufacture at home. Hence the Achilles' heel of the Japanese economy is her poor raw-material position.

Similarly the industries of Japan depend on foreign markets for the sale of their goods. Her home market is very small. Thus her silk industry which possesses all the raw materials at home depends—at least it did so until recently—on foreign markets for the sale of nearly 82% of its output, or, calculated in terms of value, for nearly 88% of its value. The remaining 18% of the production is used in the production of silk tissues of which one-fourth is sold in foreign countries. In the same way her other indus-

tries are dependent on foreign markets ; nearly 55% of the value of cotton goods produced is realised by sale in foreign countries. She also exports large quantities of tea, ceramics, electrical goods, toys, bicycles, watches, soaps, etc. In 1933, 21% of the national industrial production was exported. Compared with other countries, the dependence of Japanese production on foreign trade is greater ; the percentages of other countries are 3.2% (1933) for the United States, 20% (1930) for Great Britain and 8% (1934) for Germany. Hence the prosperity of her industries depends on their ability to sell in foreign countries.

In recent years Japan's foreign trade has assumed a new importance to her because of the growing pressure of population. Her home supplies of food are not adequate to feed the existing population and she has, therefore, to import large quantities of food-stuffs from outside. She can pay for them only by exporting more of manufactured goods and by rendering services. But as the former depend for their production on imported raw materials, there is not much margin left for her to pay for her imported food. She has been, therefore, constantly faced with the problem of unfavourable balance of trade. A part of it is made good by her invisible exports like shipping but the remainder is paid for mainly by foreign loans. This makes her trade position vulnerable.

The growth of foreign trade since the Meiji Restoration can be conveniently divided into five periods. The first period lasted from 1868 to 1893. In this period the position of Japan was that of a purely agricultural country. Her exports and imports mainly consisted of raw material and manufactured goods respectively. Until 1882 the imports exceeded exports and hence there was an unfavourable balance of trade. Since that year for some time the balance turned in her favour. The total value of her trade also showed

a rapid increase, which may be due to the stabilisation of her foreign exchange, the establishment of banks to finance foreign trade and the adoption of western commercial methods.

The second period which opened with the Sino-Japanese war (1894-90) may be regarded to have come to an end on the eve of the Great War. In this period the foreign trade showed a change in character. Exports began to consist more and more of manufactured goods and imports of raw materials. This change indicated the gradual change which was coming in the Japanese economy. Encouraged by the government and protective tariffs, industries were rapidly growing in number and their surplus production was being exported to foreign countries. The two wars, the Sino-Japanese and the Russo-Japanese, also gave a stimulus to their development. The rapid growth of import and export trade, therefore, marked the beginning of Japan's career as an exporter of manufactured goods. The total foreign trade of Japan before the war exceeded slightly the figure of 1000 million yen. The balance of trade, however, was unfavourable for nearly all the years of the period.

The years 1914-1919 marked a new epoch in the history of Japan's foreign trade. Unhampered by foreign competition, the Japanese industries reaped a rich harvest in five years. The value of total foreign trade advanced to nearly 4,300 million yen. She also enjoyed for these years a favourable balance of trade. Measured in terms of per capita trade the growth of her trade was nearly three-fold. According to the Department of Finance the foreign trade in terms of value per head of the population in 1913 and 1919 was 25.52 and 75.95 yen respectively. This phenomenal growth marked out a new career for Japan's industries in foreign markets.

The fourth period beginning with the depression

of 1921 lasted up to 1931. In the early years the revival of competition of foreign countries in the international markets affected the Japanese industries adversely. The consequent depression was made worse by the earthquake of 1923 which threw the economic structure in chaos. For some time thereafter trade showed revival. Exports increased because of the depreciation of the yen and imports showed an increase as large quantities of materials were imported to reconstruct the devasted regions. Thus a new record level of trade was reached in 1925 when the total trade was valued at 4,878 million yen. But the revival of trade was more marked in imports for the seven years from 1920 to 1927, and the average annual adverse balance was in the neighbourhood of 398 millions. In 1927, however, the recovery was retarded by the crisis of that year. Again an attempt was made to reorganize industries by rationalizing them, but before they could secure a foothold in foreign markets, the depression of 1929 upset the progress. The depression in industries became more pronounced next year when the embargo on gold placed during the war was lifted and the yen was overvalued. To maintain the exchange value of the yen, currency had to be deflated. This brought down the price-level and added to the difficulties of the industries which were suffering from the severe depression in foreign countries. But faced with these difficulties industries undertook further rationalization and the elimination of unsound concerns. This improvement proved very useful after Japan left the gold standard again at the end of 1931.

The fifth period, therefore, opened with fresh hopes for the expansion of trade. Encouraged by the depreciation of the yen and the government expenditure on armaments, industrial production recorded further progress. The foreign trade of Japan also

made a remarkable progress in the next four years. The inroads made by the Japanese exports in foreign markets were so serious that other countries were alarmed at their competition. In these years the foreign trade of Japan showed a striking contrast with the foreign trade of other countries and also with the total world trade. While the latter were shrinking, the former showed an unprecedented growth. The following statistics show the growth of imports and exports from period to period :

	Imports	Exports
	(In million yen)	
1868-72	22.6	15.7
1888-93	72.3	77.1
1894-98	223.0	139.2
1909-13	544.1	495.6
1914-16	628.2	808.8
1916-19	1,625.9	1,887.9
1921-24	1,985.0	1,536.2
1925-27	2,376.4	2,114.2
1928-30	1,986.2	1,863.4
1931-33	1,528.1	1,472.6
1934	2,282.5	2,171.9
1935	2,472.2	2,499.0
1936	2,763.6	2,692.9

It was stated in the last paragraph that in the last period of the growth of foreign trade the share of Japan in the world trade showed an advance and her foreign trade increased when the international trade was shrinking. In 1929 Japan's percentages in the world trade were 2.93 for exports and 2.80 for imports. In 1933 the two respective percentages were 3.13 and 3.04. Correspondingly the quantum of Japanese exports showed a considerable rise though their gold value did not show the same trend. The following indices show the position of the Japanese exports compared with world exports :

	1930	1931	1932	1933	1934
Quantum of world exports	100	92.5	79.6	81.2	83.4
Quantum of Japanese exports	100	103.0	122.0	135.0	159.0
Value (gold) of world exports	100	71.5	48.7	43.7	43.0
Value (gold) of Japanese exports	100	77.4	51.2	51.6	53.1

The foreign trade of Japan as a whole has shown, as indicated by the above figures, a surprisingly rapid growth. But it shows certain weak features which give cause for anxiety. One of these features is the continuous excess of imports over exports. From the very beginning of her industrial career Japan has been faced with the problem of unfavourable balance of trade and the need for devising measures to balance imports and exports. Between 1868 and 1893 there were as many years of unfavourable balance of trade as favourable ones. Since then until 1936 excepting for seven years of which four were the years of the Great War, Japan had an unfavourable balance of trade. This drawback of her trade is no doubt the result of her weakness in raw materials. The following figures show the unfavourable balance of trade from period to period :

Period	In million yen
1868-1881	—77.6
1882-1893	+69.8
1894-1914	—933.0
1915-1918	+1,408.0
1919-1936	—3,735.5

Japan has made an attempt to meet a part of her unfavourable balance of trade from the payments received for her invisible exports consisting of receipts

on account of shipping, insurance, profits from Japanese enterprises in foreign countries and expenses of tourists coming to Japan. In the first period, as the above figures show, excepting for 1868 and 1876, the balance of trade was unfavourable and its total for the period amounted to 77.6 million yen. The excess of imports was due to the import of machinery and manufactured goods, the first to help the establishment of industries and the second to satisfy the demand of the people who had recently been brought into contact with the Western civilization. It was also partly due to the high internal prices resulting from depreciated currency. The unfavourable balance was chiefly met by the export of gold and silver which was estimated at 70 million yen. In the next period, 1882-1893, Japan had a favourable balance of trade. This must be attributed to the stabilisation of currency and exchange and the efforts of the government to encourage export trade. She had a total favourable balance of trade of 69 million yen, and, therefore, gold and silver amounting to 27 million yen were imported from foreign countries. With the industrialisation of the country after 1894, the import of machinery, raw materials, and foodstuffs again tipped the balance against her. Between 1894 and 1919 the unfavourable balance of trade amounted to 933 million yen. This amount, however, was met chiefly through government borrowing abroad. In this period it is estimated that government borrowed in foreign countries about 1,800 million yen. In 1914 the amount of the government's outstanding foreign loans was estimated at 1,430 million yen. During the last war, for reasons already explained, Japan had a total favourable balance of trade of 1,408 million yen. A part of this was used to repay old loans and the remainder was held on credit in foreign countries. Soon after the war the balance of trade again went against her. The unfavourable balance of trade was the heaviest between 1920 and 1928. It was occasioned, among other factors, by

the high price level prevailing in Japan, by the heavy purchases of raw materials made to meet the post-war boom and by the import of materials for the reconstruction of the devastated regions after the earthquake of 1923. A part of it was met from her credits in foreign countries and the remainder by borrowing and from her receipts for invisible exports. Since 1928 the unfavourable balance has been considerably reduced and she is trying to meet it by extending her invisible exports. The following figures show the unfavourable balance of trade in recent years :

(In million yen)

1924	- 646.3	1931	- 88.6
1925	- 267.0	1932	- 21.4
1926	- 332.7	1933	- 56.1
1927	- 186.8	1934	- 110.6
1928	- 224.3	1935	- 26.8
1929	- 67.3	1936	- 70.7
1930	- 76.2		

The foreign trade of Japan supplies a good example of how the character of trade undergoes a change with the industrialisation of a country. Though Japan started exporting manufactured goods in the last decade of the nineteenth century, before the Great War she was not in the real sense an industrial country. The export trade still consisted of mainly raw materials or half-finished goods and imports of manufactured goods. The war, however, completely changed the Japanese economy. Because of the industrial progress made in the last three decades, today imports consist of nearly 80% of raw materials and exports of nearly 85% of manufactured and half-finished goods. The character and direction of trade have been also undergoing a constant change because of the urgent necessity of balancing imports and exports. The following table shows the percentage change in the main groups of imports :

	1912-14	1923	1935
Food, drink, etc.	13.7	12.6	7.8
Raw materials and			
unfinished goods	68.5	67.7	80.1
Wholly finished goods	17.1	17.7	11.6
Others	0.7	2.0	0.5

From the above table the predominance of raw materials in the imports is clearly indicated. In 1935 they accounted for nearly 80% of the total imports. Of the raw material imports, textile raw materials accounted for 50% of imports. Cotton alone accounted for 32% of the total imports. The cotton textile industry has grown very rapidly but as Japan produces very little of the raw material, it has to be imported from outside. The value of imports has grown continuously from 2.2 mill.on yen in 1888 to 233.5 million yen in 1913 and to 731.4 million yen in 1934. The chief sources of import are the United States, India, China and Egypt. As stated before, an attempt is being made to produce cotton in Korea and Manchukuo. Even if this succeeds, as in the meanwhile population of Japan would grow and the home consumption of cotton tissues would increase proportionately, it may not be possible for her to reduce the imports of cotton. The cotton industry to-day occupies a very important position in her economy. In addition, with the growth of western habits, the consumption of woollen goods has increased in the country. The Japanese woollen industry, therefore, imports raw wool and woollen yarns in considerable quantities from Australia, South Africa and England. Other raw materials which she imports are iron ore, pig iron, aluminium, lead, zinc, copper, tin, petroleum, chemicals, manures, timber, etc. They are vital to her industries and, therefore, she is not in a position to reduce their imports. Another item on the import side which she cannot dispense with is foodstuffs. In the post-war years with a rapid progress of agriculture and overproduction in the world, prices of agricultural

goods declined seriously. The government, therefore, took, certain steps to control imports. Hence this item showed a decline in recent years, but again it must be stated that as the population grows, the imports may increase rather than decrease. Hence there is no possibility of the imports of foodstuffs being reduced. The third group consists of the manufacturers, mainly textiles, machinery and metal manufacturers and chemical products. There is some scope for reduction of imports in this group. As the industries of Japan grow it may be said that imports in this group may decline but it would not be wrong to expect that there would be a corresponding rise in raw material imports.

The import trade, therefore, consisting of raw materials is vital to the industrial progress of Japan. Any attempt to reduce imports would undermine industrial progress. Though recently the government made an attempt to control the import trade, it was mainly with the motive of securing commercial concessions from other countries. If, therefore, Japan has to balance her imports and exports, which at least she must attempt to do, she must try to expand her export trade. At present out of the imported raw materials, cotton alone enters the export trade in any considerable amounts in the finished form. From this it follows that if the export trade is to be expanded to balance imports, other industries consuming imported raw materials must produce an exportable surplus. It amounts to saying that, as will be proved presently, her export trade must be made more broad-based. The following table shows the percentages of the different groups in the export trade.

	1912-14	1923	1935
Food, drink, etc.	10.3	6.3	8.0
Raw materials and			
unfinished goods	59.3	54.0	31.8
Wholly finished goods	29.1	37.4	59.0
Others	1.2	2.3	1.2

The above table shows a remarkable change which has occurred in the constituents of the export trade. The proportion of foodstuffs and raw materials has declined and that of manufactured goods has increased. An analysis of exported articles shows that the burden of balancing imports falls mainly on two items, silk and cotton goods. The following figures show the changes in the exports of raw silk, spun silk and waste silk in recent years :

	value (in million yen)	Percentage of the total
		value of exports
1925	912.5	40
1929	794.8	37
1930	423.8	29
1931	358.2	31
1932	386.6	27
1933	394.2	21
1934	293.6	13½

The above figures indicate a steep fall in the exports of raw silk and a decline in its percentage of total trade. The price of silk, however, fluctuates very widely and, therefore, the value of exports may not give a correct idea of the decline. But the study of the following figures of the quantitative exports shows the same trend of decline :

	(In thousand bales)		
1929-30	346	1931-32	388
1930-31	345	1932-33	323
1933-34		273	

The raw silk industry of Japan is an agricultural industry and a decline in its exports gives a serious blow to Japan's farmers. In the past nearly 80% of raw silk produced was exported and of this export nearly 95% was taken by the United States. Since 1929 its exports have been continuously declining and this decline has been attributed to the inability of the United States to import on the former scale after the

purchasing power of the people was seriously affected by the depression. The disadvantage of depending on one market was clearly indicated by the example of silk. In addition its decline has been attributed to the growth of silk industry in China and the growth of the artificial silk industry in Japan and other countries. This latter industry has been competing with silk exports. The value of the exports of artificial silk tissues from Japan increased from 30 million yen in 1930 to 113 million yen in 1934.

From the point of national economy the export of raw silk which is almost a raw material is uneconomic. More so because of the problem of balancing imports by exports. If Japan could develop the silk manufacturing industry, the export value would increase and also provide work to some people. But so far she has been unable to do it because the countries which are her silk markets like to import it in raw rather than manufactured form. America has placed a very high tariff against the import of silk tissues. Similarly the tariff has been raised in other countries. In the development of this industry, the factor of distance also goes against her. At present, therefore, the decline in silk exports has created a serious problem for Japan not only from the agricultural point of view, but also from the point of balancing imports. The government has been making an attempt to improve the organization of silk trade and to stabilise prices.

The next important item in exports is cotton yarn and tissues. The inherent position of the cotton industry is more sound than that of the silk industry. It does not depend on one market for the sale of its goods. The nearness of Japan to the Asiatic markets gives her an advantage over her competitors in distance. And though the industry is dependent on foreign countries for raw material supplies, she receives them not from one country but many. The progress made by cotton goods exports in the post-war years and par-

ticularly in the period of the depression as compared with world exports is shown in the following two sets of figures :

Exports of Yarn and Cloth		
	Value (In million yen)	Percentage of the total trade
1913	104.6	16.5
1930	287.1	19.4
1934	515.8	23.7

World Cotton Textile Exports					
	(In million square yards)				
	1927	1929	1930	1933	1934
United Kingdom	4,117	3,672	2,402	2,032	1,994
Japan	1,364	1,791	1,572	2,089	2,577
Others	2,489	2,404	1,889	1,231	—
World	7,970	7,877	5,868	5,372	—

Japan's percentage					
	share of the total	17	23	27	39
					—

The above tables show that cotton textile exports account for nearly one-fourth of the total exports. They also show that during the years of the depression, when the world exports of cotton textiles were declining the exports of Japan were increasing. The success of the cotton textile industry in the past has depended on the cheapness of cotton tissues. This factor became very favourable during the depression when the purchasing power of the people had gone down. The future of the exports of cotton goods, therefore, would depend on their quality and style, marketing facilities, political alliances of Japan and tariffs in other countries. The last mentioned factor is already going against her. Many countries have raised import duties and Japan has been required to find alternative markets for those which are lost or restricted. In two of her largest markets, India and China, the prospects for the future are not very bright. Under the influence of England, the countries of the British Empire have already taken

measures against imports from Japan. It may, however, be said that as Japan is a buyer of raw materials, she may use this power, as she did in the case of India, to create or retain markets for her goods. She may, therefore, enter like Germany into bilateral agreements and try to maintain markets.

The predominance of two commodities in the export trade introduced an element of weakness in it. The share of all textiles in the exports in 1928-29 was nearly 70%. In 1933 and 1934 it had declined to 55% and 53% respectively. This fall was no doubt the result of the decline in the export of raw silk. With the necessity to balance imports, in recent years the exports of other goods have been expanded. This is a healthy tendency which would make her export trade more broad-based and less vulnerable to changes in markets or tastes. The following statistics show the growth in the exports of principal goods other than textiles :

Exports other than Yarns and Tissues*

	1929	1933	1934
	(In Million Yen)		
Foods, tinned and bottled	25.6	46.9	50.3
Soap	1.6	3.2	3.5
Drugs and chemicals	34.8	48.2	52.4
Boots and shoes	15.0	29.6	21.5
Pottery	37.0	35.6	41.8
Glass	13.2	15.3	19.4
Metal manufactures	25.2	42.6	59.0
Clocks, scientific instruments, vehicles, machines—	38.6	67.6	124.9
Of which—			
Vehicles and parts	12.6	28.3	46.5
Machinery and parts	13.6	25.8	57.7
Lamps	9.5	15.8	15.6

*Sansom and Macrae, *Economic Conditions in Japan*, p. 93.

The above figures show that the group other than textiles is growing in value and relative importance. There is a greater variety of goods entering exports which, of course, is not fully shown by the above figures. This development, as said above, is no doubt healthy but does not change at present the fundamental weakness of Japan's export trade. In this change of the constituents of the export trade she may also meet with difficulties in foreign markets. But here also it is the cheapness of her goods which may help her to penetrate foreign markets.

Like the constituents of the export and import trade, the direction of foreign trade also shows interesting development. Because of the lack of raw materials, and the poor quality of her goods, her foreign trade shows a tendency towards raw material producing and less developed countries. Since 1929 with the restrictions placed on her goods in many countries, the direction of trade has shown further changes away from the old markets. The following figures show the percentage distribution of foreign trade by continents:

	Asia	Europe	America	Africa and Australia
1913	43.6	23.3	30.0	3.0
1923	40.9	5.7	47.9	5.5
1929	42.6	6.8	44.1	6.4
1934	53.0	10.5	23.6	12.8
		Imports		
1913	47.7	30.2	17.0	5.0
1923	41.7	22.9	29.1	6.3
1929	38.7	18.9	32.1	9.6
1934	35.6	12.9	32.2	14.3

The above table shows that Asia and America (mainly U.S.A.) hold an important position in the export trade of Japan. They took over 75% of the exports. The importance of Africa and Australia is also

gradually increasing, but that of Europe is declining. On the import side also imports from Asia and America (mainly U. S. A.) account for nearly 70% of the total. Again while the importance of Africa and Australia is increasing that of Europe is declining. Thus taking the whole foreign trade of Japan, in the post-war years the importance of Europe has been on the decline but that of Asia and America has been increasing. A further analysis of the export trade shows that with the restrictions placed in older markets the importance of new markets (Asia Minor, Afghanistan, Persia, Arabia, etc., Central and South America and Africa) has considerably increased in recent years. The present tendency of developing alternative new markets is shown by the following figures :

Comparison of New and Old Markets in Export Trade:*

	Old Markets %	New Markets %
1929	95.2	4.8
1930	92.3	7.7
1931	88.4	11.6
1932	84.0	16.0
1935	85.0	15.0

The Government of Japan does not give direct pecuniary aid to the export trade but its indirect assistance is considerable. The indirect assistance has been in the following forms : (1) The industrial guilds of small industries which play an important role in exports are assisted by the government by contributions towards their expenses, by advance of loans from banks under a guarantee from the government and by tax exemptions. These guilds are trying to organise small industries and to check internal competition. If the government thinks it necessary it orders the non-members to conform to the rules of these guilds.

*Mitsubishi Economic Bureau, Japanese Trade & Industry, p. 503.

(2) In the same manner it assists export guilds whose duties are to encourage export trade by co-operative effort and to supervise and inspect goods before they leave ports and to act as the medium of government where necessary. These guilds have played a very important part in recent times in encouraging export trade missions, holding exhibitions, distributing samples and advertising goods in foreign countries. (3) In 1930 the Export Indemnity Law was passed which introduced provisions similar to those of the Export Credit Scheme of Great Britain. According to it the losses incurred by traders through non-payment of drafts or promissory notes covering shipments to certain new or hazardous markets are partly made up by the government. Speaking about these forms of help the Report of Sansom and Macrae * says : "Although these and other forms of official aid and encouragement have no doubt accelerated the expansion of Japan's foreign trade, it would be rash to assume without further evidence that they have been more than a minor contributory cause of that expansion ; and it would be unwise to conclude that methods which have proved effective in Japan must necessarily be successful if applied elsewhere. The industrial guilds and the exports guilds and the whole system of official control of their activities have grown up in response to social and economic conditions peculiar to Japan, and in one sense they may be regarded as remedies for the disadvantages of immature industrial development. Perhaps they are less instructive as models than as a manifestation of the traditional Japanese capacity for sustained corporate effort". (4) The government has also assisted the expansion of foreign trade by sending out commercial missions to explore new markets and to suggest means of retaining or developing existing ones. Sometimes the expenses of missions sent by in-

**Ibid.* p. 101.

dustrial associations are partly paid by the government. In short the government is giving all possible help short of financial aid to encourage the foreign trade of the country which it knows is vital to the country's existence.

XXV

THE TRADE UNION MOVEMENT & LABOUR LEGISLATION

The trade union movement in Japan is still in its infancy. The former Director of Factory Inspection in the Bureau of Social Affairs, Mr. Yoshisaka, described the Japanese trade union movement as still being "a movement towards the organisation of labour" rather than one founded on the organised labour. It is indeed surprising that in spite of the progress of large scale industries in recent times, the increase in the number of industrial workers and the growing influence of western ideas, the percentage of organized workers to total industrial workers should be less than eight. "The economic structure of Japan, the system of industrial relations that exists there, and the paramount political influences", says Allen, "are all hostile to the development of strong labour organization **. The importance of the Japanese trade union movement, therefore, is not to be judged so much from its record of past achievements as from its potentialities as one of the principal factors in the future of Japan as an industrial competitor.

Modern trade union movement started in Japan shortly before the last Great War. Until then though

*Japan : the Hungry Guest, p. 180.

occasional attempts were made to organize workers, crafts guilds some of which even to-day survive were the only form of association in which workers were organized. Some of the guilds were quite powerful and were able to protect the interests of workers in their relation to employers, maintain the technical standards and uphold the dignity of their craftsmanship. Among such guilds mention may be made of those existing among wood-workers, miners, stone-masons, blacksmiths, carpenters and others. Majority of them disappeared when industry was modernised.

Attempts at organizing modern trade unions were made soon after the Meiji Restoration when the ideas of democracy and socialism were imported into Japan as if they were a part of the machine economy which the government planted on the Japanese soil. The younger generation, particularly the intellectuals, studied av'dly the preachings of Rousseau and Voltaire, and, Bentham and Mill. The first manifestation of their influence on them was the formation of a liberal party, Jiyuto, in 1880. This party advocated democratic principles and showed its sympathies towards workers.

*The first outburst of labour discontent was noticed in 1883 when the rikshamen in Tokio went on strike in protest against the introduction of horse tramways. The Jiyuto organized a trade union among them but it did not survive the imprisonment of its leader on criminal charges. Thereafter occasional attempts were made to start unions which were short lived. In 1884, a foreman employed in the Shuyeisha Printing Company of Tokyo organized a union of printers with the support of their enlightened employer, Teiichi Sakuma. It lasted hardly for two months. Again an attempt was made to organize the workers of the same company in 1889. It also failed. One of the important unions started in this early period was among iron-workers. It was known as the Domei Shinko Gumi

started in 1889. This union aimed at conciliation in disputes between workers and the employers and finally to establish the factory on the co-operative principle. It also failed because of a rumour that its funds were embezzled. Another experiment was made by shoemakers without success. The union started by them in 1892 was known as the Nihon Rodo Kyokai. Before the Sino-Japanese war, therefore, unions were born and died in quick succession without achieving any permanent benefits for the workers. Workers in modern factories, however, continued to be exploited and the tales of their suffering came from various quarters. Soho Tokutomi a social reformer, therefore, advocated in a magazine started by him in its February issue of 1887 unionism, collective bargaining and accident compensation. This was the first time when the demand of the workers was put forward through the press.

The trade union movement, however, did not make any progress for the next few years, maybe because the attention of the people was diverted to the Sino-Japanese war of 1893-94 and to the depression which followed it. Soon after the depression, interest in trade union movement was revived by the formation of the Shokko Giyu Kai (which literally means the Society of Workers to Fight for Justice) in Tokyo in April, 1897 by a group of young persons who had returned from America. It included labour leaders like Tsunetaro Jo, Fusataro Takano and Hannosuke Sawada. In December of the same year, it was reorganized by bringing in more intellectuals and was named Rodo Kumai Kisei Kai (i.e., the League for the Formation of Labour Unions). The League advocated organization of trade unions on the lines of the American Federation of Labour. Its appeal received a warm support of the workers. It succeeded in organizing unions among iron-workers, locomotive engineers, printers, carpenters, etc. The activities of

these unions soon resulted in a number of strikes which alarmed the government. The League also carried on agitation for the improvement of the provisions of a Factory Bill which the government was drafting. It also started publishing its monthly organ, the *Rodo Sekai* (Workers' World) in December, 1897. The government which did not favour these labour activities promptly promulgated in 1900 the *Chian Keisatsu Ho* (Public Peace Police Regulations) the article 17 of which gave a deadly blow to the young trade union movement and many of the trade unions and the League did not survive it for long. This article provided that :*

No violence shall be inflicted upon others, nor threat of violence made against others, nor the character of others defamed in public with the following enumerated objects in view, and no inducement nor instigation shall be offered to others with the objects in view expressed in clause 2 :

1. To make others join or prevent others from joining associations formed for the purpose of cooperation in regard to conditions and rewards of labour.
2. To make employers discharge employees or refuse applications for employment, or to make employees neglect duties or refuse applications for employment in order to effect a lockout or a strike.
3. To compel by force others to agree in regard to conditions of labour or rewards of labour, or to inflict violence upon others, or to make threat of violence against others to compel them by force to agree in regard to conditions of rent of land for agricultural purposes.

For the next 12 years, therefore, the trade union movement made little progress. Japanese writers on labour problems refer to this period as *Chinsenki* (period of submersion). The intellectuals whose ambitions were thus frustrated concentrated on the study of social problems. Mr. Katayama, one of the communist leaders, toured Europe in 1904 and after his

*Orchard, Japan's Economic Position, p. 384.

return made an attempt to start a socialist party without success. Many of the socialists who opposed the Russo-Japanese war of 1904-05 were also imprisoned by the government. The repressive measures of the government, therefore, did not permit any scope for the organization of labour. Yet there were occasional outbursts of labour unrest as in the Ashio Copper Mine, Besshi Copper Mine, coal mines in Hokkaido and the shipbuilding yard at Nagasaki. The only attempt to organize workers in this period was made among miners by Matsusuke Minami. It, however, did not prove very successful.

The trade union movement again showed signs of revival when Bunji Suzuki, the secretary of the Unitarian Church in Tokyo, organized the Yuai Kai (the Friendly Society of Workers) in 1912. It was organized not as a trade union to demand the rights of workers but as a welfare organization for the moral, economic and social well-being of the workers through mutual co-operation. This can be seen from the aims of the institution which were stated in three lines only :[†]

- “We aim to promote friendship and mutual aid.
- “We aim to follow common ideals and to develop knowledge, character and skill.
- “We aim to improve our status by our common strength and sound methods.”

Thus the Yuai Kai deliberately adopted a moderate policy to avoid being suppressed under the law of 1900. In addition to a moderate programme consisting of giving education, legal advice, and, medical and financial aid to workers, the society tried to interest in its work scholars and experts on social problems and liberal business men like Vicount Shibuzawa who were put on its advisory committee. Hence it made a

[†]Industrial Labour in Japan (I. L. O.), p. 92.

remarkable progress after its inception and became unknowingly the nucleus of the present-day trade union movement in Japan.

When the Great War broke out, the Yuai Kai was the only important labour organization in Japan. The war, however, provided a new opportunity to workers to organize among themselves. During the years of the war, the cost of living increased substantially, but there was no proportionate rise in wages. But with the expansion of the export trade of Japan, the industrialists were earning windfall profits. The workers, therefore, demanded a rise in wages under a threat of strikes. The employers could have used the law of 1900 against them but it was not to their benefit to do so, and, therefore, they yielded to the demands of workers. The Yuai Kai succeeded in intervening in a number of disputes and in settling them in favour of workers. The prestige of the Yuai Kai was, therefore, enhanced and when the sixth convention was held in April, 1918, it had 120 branches and a membership of 30,000. The success of workers in their disputes with employers encouraged them to form trade unions and, therefore, their number increased. One of the important unions which was formed in this period was the union formed by printers in 1916 and known as the Shin-Yu Kai (Faithful Friends' Society). This union marked the beginning of the Left Wing just as the Yuai Kai marked the beginning of the Right Wing in the trade union movement in Japan.

The unrest which prevailed among workers during the years of the war because of the adverse economic conditions became much more pronounced after its end. The so-called 'rice riots' were its outward symptoms. This unrest found expression in the organization of trade unions. A number of factors, however, aided them in this direction. The success of the Russian Revolution created new hopes in them regarding the possibility of social changes. The success of

the Allies also glorified the principle of democracy and a new wave of liberalism swept over the country. The establishment of the International Labour Organization and the holding of the Washington Hours Conference in 1919 to which Japan was asked to send delegates in consultation with the most representative unions also encouraged them to organize. In 1919, therefore, even the Yuai Kai was reorganized on a trade union basis. Hence the trade union activity was very brisk before and after the Conference. The following figures indicate the trade union activity between 1912-21:²

Year	Number of unions	Year formed	Number unions formed
1912	5	1917	14
1913	6	1918	11
1914	6	1919	71
1915	4	1920	66
1916	13	1921	71

The government, however, elected in 1919 and the subsequent years the delegates to the International Labour Conference by a method of "multiple elections" in which organized workers held a secondary position. Consequently the delegates appointed were often non-unionists. This was resented by workers. They were, therefore, encouraged to sink their differences. The trade unions of different shades of opinion, therefore, came together for the first time on the occasion of the May Day demonstrations in 1920. It was also on this occasion that an attempt was made to form a loose federation of unions, the Rodo Kumiai Domei Kai (League of Labour Unions). This federation, however, proved to be shortlived. The Yuai Kai before leaving the Domei Kai reorganized itself with a radical programme under the name of the Nihon Rodo

*Industrial Labour in Japan, (I. L. O.), p 93.

Sodomei (General Federation of Japanese Labour). The Japanese trade union movement, therefore, swung to the Left and in the next few years its progress was marred by a number of splits and the formation of a number of separate federations. But after the earthquake of 1923, realising the futility of militant methods and the immediate need for giving relief to workers, the trade union movement again swung to the Right. The immediate factors which brought about this unexpected change in the ideals were that in 1923 the government declared its intention of introducing shortly manhood suffrage and that in 1924 the trade unions were allowed to elect their own representative to the International Labour Conference. These changes created new hopes among the trade union leaders to improve workers' conditions by constitutional methods as in England. In these hopes they received an additional support from the success of the Labour Party in England in forming the government for the first time in 1924.

From 1925, therefore, the trade unions have concentrated their energies on political activities consisting of organization of political parties to secure parliamentary representation. An attempt was also made to organize a single national federation of trade unions. But because of the growing influence of communism for some time, it was found difficult to organize a single federation of trade unions or even a single political party. Recently, however, again an attempt was made to form a loose federation of moderate trade unions under the name of the Nihon Rodo Kurabu (Japan Labour Club). In September, 1932, it was reorganized into the Nihon Rodo Kumiai Kaigi (Japan Trade Union Congress). Since its inception this body has concentrated its efforts on organizing workers and on securing a legal recognition of trade unionism. At the fifth annual session of the Congress held in October, 1936, it urged that "the Government should proceed

without delay to give legal recognition to trade unions, carry out measures for controlling industry and labour, set up a new Department of Labour, and make plans for the co-ordination of labour administration".* The following figures show the recent growth of trade unionism in Japan :†

Growth of Trade Unions, 1920-1935

	Number of trade unions	Membership		Number of trade unions	Membership
1920	273	Uncertain	1927	505	309,493
1921	300	103,412	1928	501	308,900
1922	389	137,381	1929	630	330,985
1923	432	125,551	1930	650	342,379
1924	469	228,278	1931	768	370,123
1925	457	254,262	1935	—	412,126‡
1926	488	284,739			

The domination of the trade union movement in Japan by intellectuals led to dissensions and formation of groups sharply divided as regards their ideals. The process of disintegration started in 1919 when the Sodomei left its conciliatory attitude and swung to the Left ; it became more pronounced after 1924. "The first dissension in the Nippon Rodo Sodomei was a danger signal marking a period of complete disruption, which threw all the labour unions and the proletarian political party into consternation. Dissensions and reorganizations among unions are still taking place. It is something like a chemical compound. Heterogeneous elements disintegrate to harmonize with homogeneous elements. They are crystalizing into three substances, more properly called, three currents of thought, viz., the Right Wing, the Left Wing, and the Centrists".* This is how trade unions were divided in 1927. Though the prospects of trade unionism have

*I. L. O. Year-Book, 1936-37, p. 20.

†Industrial Labour in Japan, (I. L. O.), p. 116.

‡I. L. G. Year Book 1936-37, p. 583.

*Harada, Labour Conditions in Japan, p. 196.

changed since the formation of the Japan Trade Union Congress, individual organizations can still be classified into three groups whether they belong to the Congress or not.

In 1930 nearly 75% of the organized workers belonged to the Right Wing unions. There are five leading unions in this group: "Nihon Rodo Sodomei" (General Federation of Japanese Labour), "Nihon Kaiin Kumiai" (Japanese Seamen's Union), "Kaigun Rodo Kumiai Renmai" (Federation of Naval Arsenal Workers' Unions), "Kagyo Rodo Sodomei" (Federation of Workers in State Undertakings), and "Kaiin Kyokai" (Mercantile Marine Officers' Association). The general nature of the programme of the Right Wing unions may be gauged from the programme of the Nihon Rodo Sodomei. It consists of the following eight points: (1) eight-hour day and forty-eight-hour week for workers in general industry, and six-hour day and thirty-six-hour week for mining workers engaged in underground work; (2) equal pay for equal work; (3) establishment of minimum wage; (4) abolition of the system of temporary employment; (5) abolition of night work; (6) repeal of the Public Peace Police Act and the Public peace Preservation Act; (7) May Day as the national holiday; (8) nation-wide economic co-operation. Though this programme aims at improvement of labour conditions, it cannot be regarded as very radical.[†]

Unions representing various shades of syndicalism and communism are grouped in the Left Wing branch of the Japanese trade unionism. The most representative body of the syndicalist opinion is the "Zenku Rodo Kumiai Jiyu Rengokai" (National Federation of Trade Unions). Because of its advocacy of direct action to attain the goal of workers, it lost support of the moderate following and its membership declined after 1923. Its influence to-day is negligible. The principal

[†]Industrial Conditions in Japan, (I. L. O.), p. 105.

communist unions were federated under the "Nihon Rodo Kumiai So-Hyogi Kai (General Council of Japanese Trade Unions) until it was dissolved by government order in 1928 because of its alleged subversive activities. Even then the number of people believing in its ideology was very great and they carried on secret activity. It was again revived in Tokio in April, 1931. The nature of its programme before its dissolution contained in the following points : (1) The eight-hour day and forty-eight-hour week (six-hour day and thirty-six-hour week for miners); (2) the establishment of standard living wages ; (3) the establishment of an unemployment maintenance system ; (4) protective legislation for the employment of non-industrial workers ; (5) the protection of women and children ; (6) fundamental revision of the Factory Act, the Mining Act and the Mariners' Act ; (7) the abolition of the bureaucratic Rules of Employment ; (8) enactment of a satisfactory Trade Union Act ; (9) drastic revision of the Health Insurance Act ; (10) immediate abolition of the Peace Preservation Act, the Act concerning the Conciliation of Labour Disputes, and other anti-labour legislation ; (11) freedom of workers to join any political party ; (12) decided opposition to Fascism ; (13) aid for the labour movements in Korea and Formosa ; (14) struggle for the establishment of the national unity of the working class ; (15) non-recognition of the International Labour Conference ; (16) struggle for the unity of the international trade union movement. The above programme indicates how there was very little difference in the demands of the Right Wing and the Communist unions of the Left Wing and how they remained divided because of the supposed ideals and the views of their leaders.

The Centre unions are mostly led by intellectuals. They represent a point of view which is a compromise of

[†]Harada, Labour Conditions in Japan, p. 202-02.

the two points of view, the Right and the Left Wings. The principal organization in this group is the "Nippon Rodo Kumiai Domei" (National Alliance of Trade Unions). Its programme is very similar to that of the "Nihon Rodo Sodomei". It consists of the following points ; (1) Positive support to the "Nippon Ronoto" (Japan Labour-Farmer Party) ; (2) eight-hour day and forty-eight-hour week ; in the mining industry, six-hour day (shifting the work at the entrance of the pit) and thirty-six-hour week ; (3) establishment of the minimum wage system ; (4) absolute prohibition of women and juvenile workers from employment for night work ; the improvement of the factory dormitory system ; (5) the abolition of the Police Peace Regulations, Peace Preservation Art, and all other legislation suppressing the labour movement ; (6) to institute May Day as a national holiday ; (7) the recognition of the Nationalist Government in China.* From this programme also it becomes clear that the differences between the Right Wing and Centre trade unions were not very wide and if the leaders could agree their fusion was possible. As has been said before, these two types of unions came together when the Congress was formed in 1932.

The percentage of organized to total industrial workers, as remarked at the beginning of the chapter, has been about eight. This shows that the growth of the trade union movement in Japan has been very slow. The reasons for this seem to lie mainly in the structure of Japanese industry, the relationship of workers to employers, the attitude of the government, and the internal difficulties of the movement itself. Of them the structure of the industry and the attitude of the government seem to have been the chief obstacles. Of the existing factory industries, the textile industry occupies a pre-eminent position. In 1930 nearly one-

*Harada; Labour Conditions in Japan, p. 203-04.

third of factory workers were engaged in it. But 85% of them are girls of a tender age and many of them live on the premises in dormitories directly under the eyes of the employers. They generally take up employment for a few years to save enough for dowry. They have, therefore, very little interest in organization. Hence in 1931, out of 370,000 organized workers, hardly 74,600 came from the textile industry. The majority of remaining factory establishments employ between 5 to 30 workers. Below them are scores of small establishments usually not included in the factory statistics which employ less than 5 workers. The relations of workers to employers in them are more close and prevent any organization among them. Unionisation has, therefore, spread only to those factory industries where purely modern factory conditions exist. Moreover the paternalism of the Japanese employers in small as well as large scale industries gives rise to a relationship between them which is not very encouraging to organization. The dormitory system, semi-annual-bonus, extra payments of rice and clothing in lieu of wages, employee saving plans, all bind the workers to their employers more intimately.

The attitude of the government also has not been very favourable to trade unionism and it has adopted, as said before, a ~~repressive~~ policy. The police who possess wide powers keep a constant watch over what they call 'dangerous' activities and the spread of 'dangerous' thought. Many of the Left Wing trade unions were ordered by it to be dissolved when their activities were regarded to be contrary to the interests of the government. For the same reason there is no law in Japan even to this day which legalises trade unionism and if it exists, it does so on the sufferance of the government.

In addition to these external factors, the movement has suffered from internal dissensions to which a reference has been made before. Trade unions pur-

suing differing ideals were unable to create a united national labour front as in other countries which could make its weight felt on the government and the employers. This was all the more necessary because of the hostility of latter. This weakness has been partly removed by the organization of the Congress in 1932. But even to-day there are so many independent unions that it may take a long time before complete unity is achieved. There seems to be no reason why it cannot be achieved in view of the fact that there is a close similarity in the programmes of the unions of the three groups.

Lastly the leadership of trade unions has come from the intellectual classes and, therefore, it has attached too much importance to abstract ideals rather than to constructive activities for members. If the movement could secure real worker-leaders, perhaps, the prospects of the Japanese trade unionism may change. But the strength of the Japanese trade unionism to-day, however, is very small because of the obstacles mentioned above. It has yet to make up a long lee-way before it can become an effective force in the industrial organization of Japan.

• Labour Legislation

The state protection to labour is, as has been seen from the economic development of other countries, an accepted phase of modern industrialism. In Japan, however, legislation relating to hours of work, conditions of work and general health, and the employment of women and children was enacted only recently and, therefore, it is still imperfect.

After 1870 the modern factory industry made its appearance in Japan. Though in the beginning the number of factories and the workers engaged in them was small, in the course of time both increased considerably. But because of the influence of feudalism, the nature of industry and the attitude of the govern-

ment, no attempt was made to legislate on labour conditions. "So long as the feudal outlook dominated national economic life, and industrial relations were regulated in accordance with the paternalistic conception of an earlier age, the need for legal regulation of conditions of labour was not understood. It was not until the methods of Western industrialism were firmly established in Japan that it began to be realised that the traditional institutions did not meet all the needs of a modern industrial economy, and that the State had a duty to the ever-increasing numbers of wage-earning factory workers handling power-driven machinery with its attendant risks."* Hence, the attitude of the state became more sympathetic in the post-war period may be because of the rapid extension of industry during the war and the growing consciousness of labour about its rights as expressed through organization of trade unions. As a member of the League of Nations, the government was also influenced by the decisions of the International Labour Conference.

The changing attitude of the government is fully reflected in the manner in which it handled labour legislation. The first Factory Act was initiated by the government in 1882 but it did not become law for nearly 30 years, i.e., until 1911. It was hanging fire for such a long time because of the opposition of employers, the lack of a strong trade union support and the weakness of the government. In fact it was finally accepted by the legislature because it was substantially modified in favour of employers. The main features of the Factory Act of 1911 were as follows: (1) it applied to factories regularly employing 15 or more persons or to those engaged in dangerous or unhealthy work; (2) the minimum age of employment was fixed at 12, but light work was allowed to children between the ages of 10 and 12: protection was extended to chil-

*Industrial Labour in Japan, (I. L. O.), p. 135.

dren upto the age of 16 ; (3) the hours of work of women and protected children were fixed at 12 per day ; but they could be extended to 14, as a special case, in the silk industry (as it was an export industry) ; (4) night work for women and children between 10 p.m. and 4 a.m. was prohibited ; (5) employment of women for five weeks after confinement was prohibited ; (6) provision was also made for safety, health, holidays and rest periods for women and children and for employers' liability in cases of injury sustained by workers. The Act was put into force from September 1, 1916. But the enforcement of the prohibition of night work was delayed. The Act covered in all 18,931 factories employing 1,118,077 workers. It did not apply to adult male workers at all. It, however, must be appreciated that the Act marked the beginning of a change in the attitude of the government and employers towards labour.

The subsequent development of the factory legislation has been influenced by the International Labour Conference of 1919 and the subsequent year. Taking advantage of a provision in the Peace Treaty for a special consideration to certain countries, the framing of conventions of labour conferences, Japan pleaded for such treatment at the Washington Hours Conference. In pursuance of it, Article 9 was added to the Hours Article 5 made concessions to her in regard to the minimum age of admission to industrial employment and night work for young persons.† These had their in-

†In framing any Recommendation or Draft Convention of general application the Conference shall have due regard to those countries in which climatic conditions, the imperfect development of industrial organization or other special circumstances make the industrial conditions substantially different and shall suggest the modifications, if any, which it considers may be required to meet the case of such countries". (Part XIII-Labour Article 405 of the Peace Treaty of Versailles.)

fluence on the subsequent legislation as also general maternity convention and the convention regarding the might work for women.

In the light of the recommendations of the Washington Conference, an Amended Factory Act was enacted in 1923 ; the chief provisions of the Act and Regulations issued under it are : (1) it applies to factories employing 10 or more workers and dangerous trades ; (2) the minimum age of employment is raised to 14 (under a separate Act, the Minimum Age of Industrial Workers Act), but a child above the age of 12 may be employed if he has completed the elementary school education ; the protected age is extended to 16 years ; (3) hours of work for women and young persons (between the years of 14 and 16) are fixed at 11 hours a day ; but as the Act requires a break of at least one hour when the work lasts more than ten hours, the legal maximum of working hours in practice for women and children is ten hours per day ; (4) it prohibits night work for women and young persons between the hours of 10 p.m. and 5 a.m.; but it may be extended to 11 p.m. with the permission of competent administrative authorities ; (further if the operatives were divided into two or more sets and were employed alternatively, factories were exempted from the operation of this clause until 30th June, 1929); (5) provides maternity leave for 4 weeks before and 6 weeks after confinement ; further employers are required to allow two

[†]Article 9 of the Hours Convention permits the factory legislation in Japan to be made applicable to factories employing 10 or more workers and limits the actual hours of work to 57, and in the raw silk industry to 60, per week for workers over 16 years of age. It further provides that the actual hours of work of young persons under 15 (later on 16) in industrial establishments and of miners shall not exceed 48 hours per week. Article 5 permits employment of children over 12 years of age if they have finished elementary school education. It also requires the age limit of protection to young persons to be extended to 16 years after 1st July, 1925.

periods of thirty minutes each to women to nurse the child if it is less than one year old ; (6) workmen injured or killed by accident or becoming ill as a result of their duties are entitled to compensation from employers ; the amount of the compensation has been also considerably raised ; (7) payment of travelling expenses from factory to home is provided when a juvenile worker or a female worker is discharged by the employer at his convenience ; (7) when a worker's employment is terminated, an employer is required to give at least 15 days notice or in lieu of it at least 14 days pay ; (8) every employer of more than 50 workers is required to prepare rules of employment and send a copy of it to the prefectoral government. This Act was enforced in 1926. The provisions of the Act show that many of the Washington conventions were given effect to by it. It, however, did not make any provision for adult male workers. The scope of workmen's compensation was widened in 1931 by passing an Act which came into force next year. It applies now to almost all industrial workers.

Separate legislation regulating mining industry is in force in Japan. Provisions relating to it are contained in the Mining Act of 1905, as amended in 1924 and the Regulations for the employment and relief of miners issued in 1916, 1926, and 1928. Before 1926 the hours of work for women and children were limited to 12 per day ; they were reduced to 11 in 1926 including an hour's rest ; in 1928 the law was extended to include male workers also ; thus from September, 1930 their hours have been reduced to 10 per day and for women and young persons a break of half-an-hour has been provided ; their working hours, therefore, amount to 9½. The amendment of 1928 prohibits night work for women and children from 1933. As regards the minimum age of employment, health, safety, maternity benefits and accident compensation, provisions are similar to those in the Factory Act.

An attempt has been made to introduce social legislation in Japan. In 1922 the first Health Insurance Act was passed ; it was partially enforced in July, 1926 and then fully in January, 1927. It applies compulsorily to every worker employed in a factory or mine to which the Factory Act or the Mining Act applies, and he is required to take out health and accident insurance ; in the case of a female worker, she is required to take out a maternity insurance. The Act does not apply to temporary workers and administrative staff drawing a salary exceeding 1,000 yen per annum. It may apply to building trade, public works, land transportation, electricity industry, etc., if more than half of the workers engaged in them invoke it. Benefits are provided for sickness, injury, maternity and death. In the case of sickness and injury they include medical attendance and cash allowance. The maximum days for medical attendance and cash allowance are limited to 180 ; after that the compensation provided in the Factory Act and the Mining Act applies. Maternity benefit includes a payment of 20 yen to defray the expenses of child-birth and cash allowance for ten weeks (four weeks before and six weeks after confinement) at the rate of 60% of wages. In the case of death of an insured person, a payment twenty times the daily wages or a sum of 20 yen whichever is greater is paid to meet the burial expenses. The funds necessary for the scheme are realised from contributions from workers, employers and the state.

The introduction of an unemployment insurance scheme was under consideration of the government for a long time, but because of the financial burden involved in it, it did not materialise. In May, 1936, however, an Act was passed which provided for relief. It applies to all factories and mines employing not less than 50 workers, but covers only wage earners and not salaried employees. It provides for a cash allowance to all workers leaving employment. The resources

necessary for giving effect to the Act are provided by contributions of 2% for the total wages of workers and 2% of the total wages paid by employers, to which a further contribution is made by employers in proportion to profits, fixed in each instance by the authorities responsible for the enforcement of the Act. The right is reserved to employers, subject to approval of the authorities, to constitute retirement allowance funds on a different basis. The Act became effective from January 1, 1937.*

In addition to the legislation mentioned above, there are certain measures enacted by the state in the interest of workers. A national system of employment exchanges has been established in Japan under the Employment Exchanges Act of 1921, the Seamen's Employment Exchanges Act of 1922 and the Regulations for the Control of Profit-Making Employment Exchanges of 1925. Similarly regulations have been passed for prohibiting the use of white phosphorous in the manufacture of matches, for controlling recruitment of workers and dormitories, for the prevention of accidents and for hygiene in factories.

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